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Pork and Beef Packers and Lard Refiners

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Two Space Savers



Space is a valuable item in the packinghouse and the Brecht Crescent Leaf Lard Carrier helps solve the room problem. This Carrier can be used for hearts, livers and other products.

The seventy hooks hold that many hearts, livers or leaf lard from as many carcasses. Besides there is plenty of room for the free circulation of cooler air.

The Loin Rack will easily hold thirty-five or forty good sized pork loins and it can also be used for boiled hams and a good many other packinghouse products.

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1853-We Keep Faith With Those We Serve-1923

THE -NATIONAL PROVISIONER

OFFICIAL ORGAN OF THE INSTITUTE OF AMERICAN MEAT PACKERS AND THE AMERICAN MEAT PACKERS' TRADE AND SUPPLY ASSOCIATION

PUBLISHED EVERY SATURDAY

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Vol. 68.

23.

Chicago and New York, March 3, 1923.

No. 9.

Armour About to Absorb Morris Properties

Hearing Called by Secretary of Agriculture to Determine Legality of the Transaction-Statements by President White and Secretary Wallace

The long-talked-of "merger" of Armour & Company and Morris & Company will take place within a few days, according to latest developments. This is really not a merger, but the actual taking over of Morris properties and business by Armour

At the last moment the Secretary of Agriculture, as administrator of the Packer and Stockyards Act, steps in with a formal complaint based on the proposed absorption as contrary to law, and will

hold a hearing on April 2 to determine the status of the transaction.

President F. Edson White of Armour & Company declares that this action is merely for the purpose of enabling the courts to pass upon the legality of the proposition. He believes the government sees no objection to it, but that procedure under the act will decide the matter.

A decision by the secretary that the procedure was illegal would result in an

order by him to "cease and desist." This decision would be appealed to the federal courts, and the legality of the transaction there thrashed out and decided.

THE NATIONAL PROVISIONER presents here the summary of the statement and complaint issued by the Secretary of Agriculture, the statement of President White of Armour & Company, and some unofficial news concerning the taking over of these properties.

The Complaint

The complaint of the Secretary of Agriculture names as respondents Armour & Company of Illinois, Armour & Company of Delaware, J. Ogden Armour, chairman of the board of directors of these two companies, and Morris & Company.

The complaint charges that J. Ogden Armour, acting for himself and the Armour corporations, contracted with Morris & Company and the Morris family to acquire all of the assets of Morris & Company, including its business, patents, and good-will, and its interests in its subsidiary and allied companies engaged in the meat packing and related business; that Morris & Company is to receive approximately \$30,000,000 to be paid approximately one-third in cash, one-third in preferred stock, and one-third in common stock of Armour & Company of either Illinois or Delaware, the purchaser to assume the outstanding liabilities; and that the transfer is to take place on or before February 28, 1923.

Eliminating. Morris & Company.

It is charged that this transaction provides for the entire elimination of Morris & Company from the meat packing field, and constitutes a violation of Title II of and constitutes a violation of Title II of the Packers and Stockyards Act, 1921, in that the acquisition by the Armour inter-ests of Morris & Company, including the capital stock or business of other corpo-rations owned in whole or in part by Morris & Company, on the one hand, and the acquisition of the stock of Armour & Company of Illinois or Delaware by Morris & Company on the other hand constitutes & Company, on the other hand, constitutes

a restraint of interstate commerce and creates or tends to create a monopoly in many sections and communities of the United States and foreign countries in the purchase of livestock and the sale of livestock products.

Notice is given that the charges will be heard beginning at the office of the Secretary of Agriculture in Washington, at 10 o'clock a. m., on the second day of April, 1923, when the respondents will be given an opportunity to file an answer and be heard as to whether or not the Secretary of Agriculture shall sustain the charges and issue an order requiring the respondents or any of them to cease and desist from violating any of the provisions of (Continued on page 46.)

Your Labor Costs!

Have you ever figured them down to a point where you know where you are at?'

Have you ever attempted to study them with a view to saving money—not by "cheese-paring," or "cutting wages" (and causing labor trouble)—but by an intelligent study of the way in which the wages you pay may be made to get the most both for you and your employee?

Further discussion of this subject of Time Study of Labor Costs will appear in the pages of THE NATIONAL PROVISIONER. It will be worth your while to watch for it.

The Explanation

Following publication of the complaint and statement by Secretary Wallace, President F. Edson White of Armour & Company announced that his company was ready to meet the issue and had no fear of the outcome. The action decided upon was considered both legal and advisable from an economic standpoint.

In his interview given to the press, President White said:

"The filing of a complaint by Secretary Wallace against the purchase of the Morris properties does not come as a surprise. When we put the whole matter up to the government and the public, we gained the impression that while the government could see no legal objection, nevertheless the secretary would make a test case under the Packers and Stockyards Act.

"The great war was primarily responsible for the conditions which made it necessary to refinance and reorganize our business. The government controlled us during the war, compelled us to buy raw products at the highest prices in history, encouraged production to a point which filled our cellars and storerooms with the costliest products we have ever owned, and then left us holding the sack by relinquishing control and dumping its war surplus in such a fashion as to ruin the market for the stocks we had been com-

market for the stocks we had been compelled to buy.

"Our procedure is approved by the best economic and financial authorities, and we are assured of the wisdom as well as the legality of what we seek to do, and we have no fear as to the outcome of court procedure. court procedure.

A Wrong Impression.

"The idea that our purchase of the assets of Morris & Company is out of

accord with public-policy, or that it would constitute an undue restraint of interstate trade or create a monopoly, is in our opinion without foundation. Secretary Wallace's report submitted to Congress shows that the Morris and Armour volumes combined would total only about 15 per cent of the business in meat foods done by all packers and only about 23 per done by all packers, and only about 23 per cent of the business done by those packers who are under federal inspection.

"There exists no legal or economic authority for holding that 15 per cent of the total business gives domination or is detrimental to the public interest. In numerous other fields of enterprise much greater proportions of the business are done by single firms without injury to the public's interests, and without causing governmental concern.

"There are in the meat industry approximately 1,300 packing concerns to as sure the competition which is conceived to be necessary to keep prices at a minimum.

"We who have spent our lives in this business and who have given it more than we have taken out, know from well-grounded experience, that the proposed grounded experience, that the proposed acquisition of the Morris properties promises benefits to the public, just as it does to Armour and Company, and is not out of accord with public policy or public serv-Through such acquisition great economies in overhead, in operation and in distribution charges would be effected, and in the course of time would amount to millions of dollars. The fruits of these lower costs must be shared with the public if we hope to maintain the Morris volume in the of the competition for it."

"We recognize our duty to the public and we also recognize our duty to the 50,000 or more citizens of this nation who have invested money in Armour & Company, and who are, to all intents and purthe company itself. The business owned by these 50,000 people is performing a necessary function for the public and performing it well, and at a smaller gross margin of profit than exists in any other companyly industry. comparable industry.

platform on which the administration was swept into office by the greatest vote in history proclaimed its belief in 'less government in business and more business in government.' We heartily subscribe to that slogan, and we are will-ing to meet the issue involved speedily and without any fear of the result.

What Purchase Involves.

Regarding the actual purchase of Morris & Company, it is stated that the purchase will involve only the tangible assets of Morris & Company and none of its securities. Acquirement of capital stock would be in direct violation of section 7 of the Clayton Act, and to avoid this there will be a transfer only of physical properties. The firm of Morris & Company will be left in the hands of the present owners, but will be merely a liquidating concern, holding certain accounts and securities.

Values to Be Decided.

The financial statement of Morris & Company was turned over to bankers and Mr. Armour last Saturday. On this showing the values of the properties to be taken over will be adjudicated by James B. Forgan, chairman of the board of the First National Bank of Chicago, and Albert H. Wiggin, president of the Chase National Bank of New York. They will decide on the amount of Armour & Company securities to be turned over in addition to the \$20,000,000 cash involved in the transaction.

If you are looking for a good position watch the "Wanted" page.

Packers' Traffic Problems

ms under this head cover matters of gen and particular interest to the meat and industries in connection with traffic and portation problems, rate bearings and de-is, etc. Farther information on these sub-may be obtained upon application to the tute of American Meat Packers, 509 a Wabash Ava, Chicago, Ill.

NO LABELS ON SHIPPING CONTAINER

Attention of packers is called to a change which has been made in the revision of B. A. I. Order No. 211: regulation 17, section 1, paragraph 1. The paragraph referred to now reads as follows (the amendment being indicated by the underscored portion):

"When any inspected and passed meat or product is placed or packed in an official establishment, in any can, pot, tin, canvas, or other receptacle or covering constituting an immediate or true container within the meaning of these regula-tions there shall be attached to such container or covering a trade label as hereinafter described in this regulation."

If you pack meats or other products to boxes, baskets or barrels which are in reality merely shipping containers and are not really "immediate or true" containers, you are not required to mark the contents on the shipping container.

With further reference to the paragraph quoted above; the Washington office of the Institute of American Meat Packers recently, on behalf of a member company. called the attention of the Bureau to a requirement imposed by the inspector at the member's plant to the effect that Bureau Circular Letter No. 1161 required that individual containers be provided for each of various small products, such as pork trimmings, ears, snouts, tails, etc. These products are so small as to render it impracticable to mark them and it has been the practice of the packer to distribute such products in cheese cloth wrappings.
The Bureau of Animal Industry states that such the inspector's interpretation of Circular Letter No. 1161 is erroneous and that the Bureau does not require individual containers for each of the products. On the contrary a miscellaneous assortment of unmarked edible products (in this case each kind being wrapped in cheese cloth) may be placed in a box, barrel or basket bearing a domestic meat label. The box. barrel or basket may be used over and over again. The packer in question was making deliveries of the small products mentioned by wagon, but the interpreta-tion supplied by the Bureau of Animal Industry is equally applicable to deliveries

REDUCE HOG SHIPPING LOSSES.

Figures recently compiled by the United States Department of Agriculture show that during a period of six months in 1922 there were received at nine of the principal stockyards of the country a total of 28,375 dead hogs and 38,708 hogs in a more or less crippled condition. These figures indicate a waste that is wholly unnecessary and that greatly reduces the amount of marketable pork and decreases the profit of the farmers making the ship-

The department has pointed out that nearly all of this waste may be attributed to improper handling of the hogs just prior to shipment. Quite often hogs about to be shipped are rushed to a small in-closure, penned up in a crowded way, and fed a heavy ration preparatory to being hauled or driven to the stock car. In getting them to the loading point, frequently, the animals are prodded, kicked, and hurried until worried into a highly nervous condition.

When ready for market, hogs should be

assembled long enough before the date of shipment to allow them to become rested. They should not be crowded into small pens or houses, nor fed heavy rations. If they are driven to the loading point, they should not be rushed on the way; if they are hauled, too many hogs should not be crowded into the truck or wagon. The loading chutes should not be too steep, should be made secure and have the sides protected so the animals will not fall off.

Crowding too many hogs into a car, par-ticularly in hot weather, is likely to result in a number of them dying in transit. Loading hogs after a heavy feed is in-Loading hogs after a heavy feed is injurious. A little hunger is far better for them on the journey than indigestion. There is nothing to be gained in added weight of the animals by forced feeding just before shipping. The aim should be to get as many of the hogs as possible to the stockyards in good condition.

---INTERSTATE COMMERCE CASES.

Complaints made recently to the Interstate Commerce Comission and decisions rendered by the commission in cases of interest to meat packers are reported as follows:

Cottonseed Oil Rate Reparation.-No. 12314. Swift & Company v. Director General, as Agent. Original report, 69 I. C. C., 695, modified upon reconsideration to award reparation on cottonseed oil, in carloads, switched during Federal con from Lakewood Station to Atlanta. Ga.

Intervene in Cotton Oil Case.—The Illiois Coal Traffic Bureau has been permitted to intervene in No. 14622, Board of Railroad Commissioners of the State of

South Dakota vs. C. & A. R. R. et al.
The American Cotton Oil Company and Southern Cotton Oil Company have each been authorized to intervene in No. 14594, American Linseed Company vs. B. R. &

Freight on Butter.—Representative Steenerson of Minnesota has introduced H. Butter.-Representative Res. 555, as follows:

Resolved, That the President be, and he is hereby, requested to transmit to the House of Representatives all information in his possession or in the possession of the Interstate Commerce Commission, relative to the alleged existence of a combination, practice or agreement among manufacturers of or dealers in butter tubs, under which, in addition to the usual sale price of such articles at Galena, Ill., there is added the freight charge from Galena, the place of manufacture, where to such place of manufacture is west or northwest, so that in the case of butter tubs made from native Minnesota timber at Duluth, Minn., and sold to dairymen in Minnesota, there is added to the reasonable price thereof the freight charges from Galena, Ill., to Duluth, Minn.

Unjust Rates on Soap-No. 14451, Sub. No. 2. The Cudahy Packing Co., Chicago, Ill., vs. St. Louis-San Francisco, et al Excessive, unjust, unreasonable rates on soap, in carloads, from Chicago, Ill., and South Omaha, Neb., to destinations in Omaha, Neb., to destinations in Oklahoma, Arkansas, Louisiana, Missouri, Kansas and New Mexico. Louisiana, Texas, Asks cease and desist order, just and reasonable rates, and reparation.

AUSTRIA GETS HUNGARY HOGS.

Considerable increase in importation of live hogs into Austria from Hungary is announced. Due to disparity between Hungarian and American prices, for a hundred kilograms of live hogs exported from Hungary, a hundred and seven kilograms of American steam lard can be imported. Sellers of lard in Austria tell U. S. Department of Commerce representatives that large firkins in which their lard is received are an obstacle to sales. Purchasers are said to be demanding smaller containers on account of limited amounts. garian and American prices, for a hundred containers on account of limited amounts of money available.

1923.

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Bookkeeping Records for Retail Meat Dealers

The retail meat trade has been eagerly waiting for the bookkeeping records for retail meat dealers which have been under preparation for some time by Northwestern University Bureau of Business Research and the Department of Agriculture. These records are now ready for the use of all merchants who are interested. Some 30 to 40 retailers have installed the system in Chicago and more are starting each week. Each week or so there are meetings for instruction at Northwestern University building, 311 West Lake street, Chicago

Through the co-operation of the local meat councils and the master butchers' associations, the Bureau of Business Research of Northwestern University and the U.S. Department of Agriculture are now conducting amongst retail meat dealers classes in Chicago, Detroit and Newark, N. J., for the purpose of describing and explaining the records and of securing their installation. New classes in these cities will be organized as fast as merchants request the services of the respective bodies.

It is planned in the near future to organize classes in other cities having meat councils in the hope finally of covering the entire country. Merchants should understand that the services of these organizations are without cost and that they are given solely for the purpose, first, of aiding them in improving their accounting records, and second, of securing comparable data by which they may know whether their costs are high or low in terms of the standard or average cost obtaining in the trade.

Two hundred and fifty sets of these forms-each set being sufficient for the use of a merchant for one year-are now available for distribution from the joint office of the University and the Department of Agriculture-31 West Lake street, Chicago-or from the U.S. Department of Agriculture, Bureau of Agricultural Economics, Washington, D. C. When this supply is exhausted, merchants who desire to secure the records will be charged a price sufficient to cover costs. The services of the respective organizations, however, so far as is possible, will be available at any time to merchants who are anxious to install these records and to render the report which is necessary as a basis for securing comparable data for the trade.

Records Each Retailer Needs.

What each retail meat dealer needs is a set of records which will give him the facts about his business. What the trade as a whole needs are comparable expense data by which members may compare their own experience, and according to which they may determine their merchandising efficiency. Both of these needs are provided for in these records, in the installations which are made and in the reports which are provided for.

The records which merchants use are identified solely by number. Names are not revealed and merchants need have no fear that their own expenses as such will be disclosed in any way. They should feel that they are contributing their indi-

vidual records to be used as a basis for securing the experience of the trade as a whole, and that in so doing they are not only serving themselves, but the trade of which they are a part.

Master butchers should apply to the offices of their respective associations and their local meat councils for further information concerning these records and their use, and stimulate interest in securing the active co-operation of all members of the trade in this joint undertaking. So far as is known, to the members of no other trade has a like opportunity been offered before-first, an opportunity to secure, gratis, or at a minimum cost, a satisfactory system of bookkeeping records; second, expert services to aid in installing them, and, third, the opportunity to contribute individually their own experiences for the purpose of securing standards of cost and expense by which they may determine the reasonableness of their own operating conditions

Merchants who furnish regularly monthly profit-and-loss statements in keeping with the standards established in the bookkeeping records will be supplied currently with a statement of the experience of the trade. Such experience will be cumulated from month to month and finally a complete analysis will be made which will establish once and for all what it actually costs to render the service now supplied costs to render the service now supplied by retail meat dealers.

Description of Forms.

The forms that are being used have been worked out very carefully. There are seven forms that are being distributed

are seven forms that are being distributed to retailers. A short description of each is of interest at this point.

Form 1 is the daily record sheet. On this is kept a record of all cash received and paid out, credit purchases, charge sales and goods taken out for the owner's own use. The amount paid out includes wages, rent, heat, light and refrigeration, wrappings delivery and other minor expensions. wages, rent, heat, light and refrigeration, wrappings, delivery and other minor expenses. There are various columns for the total of the day, the day before, previous totals brought forward and the total

to date.
On the reverse side of Form 1 is a space

On the reverse side of Form 1 is a space for memoranda for cash sales, charge sales and credit purchases. The use to which this is put is to make calculations there to enter on the main form.

Form 2, contains the customers' and creditors' accounts, both accounts receivable and payable. On the reverse side are directions for a monthly proof of balances. In three sections on cash receipts and payments, charge sales and customers' accounts and credit purchases and creditors'

Accounting Forms Ready

Retailers who are interested in installing the new bookkeeping and accounting system will want to have all the forms and the necessary instructions at

In order to be of service to all retailers THE NATIONAL PROVISIONER will see that forms are supplied to all who send in their names to the Editor, THE NATIONAL PRO-VISIONER, 420 Old Colony Building, Chicago.

accounts, there are given instructions for proving the correctness of the retailer's

In each section the total at the end of the last month and a summary of the changes during this month are arranged so as to bring out the total assumed to be correct for the end of this month. If this amount does not agree with the actual total at the end of the month at the end of this month, it indicates an error in the bookkeeping or a leak of some sort in the business

Profit and Loss Statement.

Profit and Loss Statement.

Form 3 is a monthly statement of profit and loss. It shows at a glance the important facts about what the business has done during the month. Explanations and suggestions to help the retailer in using the form are printed on the reverse side of the sheet. In this statement the following are some of the main items listed: sales, cost of goods, gross margin, expenses, including wages, rent, heat, etc., delivery, depreciation, bad debt, losses, trading profit, and other income and expense. pense.

pense.
Form 4 gives a monthly statement of assets and liabilities. This form enables the retailer to determine just where he stands financially. By comparing his assets and liabilities today with those of last month he can find out exactly what progress he is making. The changes in net worth following the statement of assets and liabilities show at a glance what he is getting out of the business and where the profits are going. The explanation on the reverse side of the form help in filling out the form.

in filling out the form.

Form 5 is the cash journal and has all items in separate columns in such a way that it is very easy for the retailer to make all entries clearly and comprehensively.

Form 6 is a summary of accounts and balances. On the left hand side is given the journal balance and on the other the assets and liabilities.

assets and liabilities.

This form is to be used where no general ledger is kept to prove the accounts and to supply the figures neded in filling out Form 4. In columns at the left the retailer can prove the balance of the journal by adding the totals of all debit columns and all credit columns. These must agree if entries have been correctly made. Then to prove the balance of asset and liability accounts short columns can be used.

Balances at end of this month should Balances at end of this month should be proved, so far as possible, by reference to other records. The cash balance must agree with actual cash on hand. Bank balance must agree with amount shown by reconciliation of bank statement. Balance under heading "Customers" must agree with total balances due from individual customers; list them and prove the total. Similarly with "Creditors"; the balance shown must agree with total of accounts due to individual creditors. If any balance fails to prove, it indicates either an error in the bookkeeping work or a leak somewhere in the business that should be located and stopped.

should be located and stopped.

Other balances should be proved in any way possible. Use the blank columns for assets and liabilities of each business which are not covered by the headings

Finally, Form 7 gives a record of purchases on the left side, with description and invoice totals of cash and credit totals, and on the other side the weights, listed under fresh beef, veal, lamb, pork, cured meat and sausage.

"Periodical Statements."

In practically every business it is customary to prepare at least once a month a statement showing the financial condition of the business. This is done either at the end of a calandar month or at the close of some suitable accounting period. In the retail meat business most features of

(Continued on page 54.)

Increased Meat Consumption Shown in 1922

Estimates of meat consumption in the United States for the calendar year 1922, compiled by the Bureau of Animal Industry. United States Department of Agriculture, show an increase over 1921 of approximately 6 pounds per capita and 61/2 pounds in advance of 1920. Coupled with a decrease in the exports and somewhat higher prices to producers in 1922, these figures evidence a satisfactory state of the home market, due doubtless to the prosperous condition and better purchasing power of the people generally.

Highest Figure Since 1911.

According to the estimates, the average meat bill per person in 1922 was made up of 61.4 pounds of beef, 7.3 pounds of veal, 5 pounds of mutton and lamb, and 76 pounds of pork, total 149.7 pounds. This is the highest annual consumption since 1911, when the total was 158.4 pounds. The increase in 1922 over the preceding year applied to all classes of meat except mutton and lamb, which showed decreases in both slaughter and consumption. The greatest increase was in beef, 3.6 pounds per head, while the increase in pork was only slightly less, 3.1 pounds per head. Veal increased only slightly, but consumption of mutton and lamb fell from 6.2 to an even 5 pounds per head.

The vastness of the national meat industry is realized when these per capita quantities are applied to a population of 109,-248,392, which is the census estimate for continental United States on July 1, 1922. The process of multiplication shows the total consumption of meat in 1922 was over 161/3 billion pounds, the highest in history for any country. However, slightly more meat was produced in the United States in 1918, the year of the great war effort, but the exceedingly large exports in that year reduced the consumption materially.

The meat totals are calculated by the use of average carcass weights for each of the class of animals slaughtered. . The resulting totals represent dressed meat: lard which is estimated separately, and other edible fats are not included, nor the edible offal. The latter is allowed to offset the bones and waste of the dressed carcasses.

Lard Production Highest.

The conversion of corn into lard by means of the hog is one of the major industries of the country, the product of which goes to all parts of the world. The 67,050,745 hogs slaughtered in 1922 yielded over 9 billion pounds of meat and 21/3 billion pounds of lard. This is the highest production of lard on record, and as the exports, although considerable, were less than in 1921, it follows that the total consumption was also highest. The per capita consumption of 1922 was, however, exceeded in one year, 1916.

Exports of Meat and Lard.

The adverse conditions of foreign exchange and the poorer purchasing power of European countries, especially, have seriously affected the exports of meat products. Foreign trade in beef has practically ceased, and while there has always been

a large exportable surplus of pork products and lard, the trade in the former (mostly bacon and hams) has steadily diminished in the last four years. Lard alone, chiefly through the re-entry of Germany as a large purchaser since the war, has held a commanding position in foreign trade. Exports of lard were highest on record in 1921, totaling 893 million pounds, and while they fell away over 100 million pounds last year, the total of 789 million pounds in 1922 is, nevertheless, second highest. Britain is the chief customer for our lard, and Germany comes

Per Capita Consumption.

Following are the details of the per capita consumption of meat and lard for the last three calendar years:

Class,	1920. Lbs.	1921. Lbs.	1922. Lbs.
Beef	61.2	57.8	61.4
Veal		7.0	7.3
Mutton and lamb	5.1	6.2	5.0
Pork (excl. lard)	69.0	72.9	76.0
Total meat		143.9	149.7

1921 Census Shows Less Fertilizer Made

A considerable decrease in the activities of the establishments engaged in the manufacture of fertilizers took place during 1921 in comparison with the year 1919, according to the U.S. Bureau of the Census in a report just issued. The total value of products reported amounted to \$180,374,800 as compared with \$281,143,600 for 1919, and \$153,196,100 for 1914, a decrease of 36 per cent from 1919 to 1921, but an increase of 18 per cent for the seven-year period 1914 to 1921.

Of the 588 establishments reported in 1921, 138 were located in Georgia; 57 in North Carolina; 50 in South Carolina; 47 in Virginia: 44 each in Alabama and Maryland: 28 in Pennsylvania: 22 in Ohio: 19 in New Jersey; 17 in Florida; 14 in Illinois: 12 in California: 11 in Indiana: 10 in Tennessee; 9 in Maine; 8 in Mississippi 7 in Louisiana; 6 in Delaware; 5 each in Connecticut and Massachusetts; 4 each in Kansas, New York, and Washington; 3 each in Arkansas, Kentucky, Missouri and Texas; 2 in Nebraska, and 1 each in Colorado, Iowa, Michigan, Minnesota, Montana, Oregon, Vermont, West Virginia and Wisconsin.

The South Central and South Atlantic States reported approximately 62 per cent of the value of products in 1921: 73 per cent in 1919; and 70 per cent in 1914; the North Central, Middle Atlantic, and New England States, 35 per cent in 1921; 25 per cent in 1919; and 28 per cent in 1914; and the Mountain and Pacific States, 2.5, 1.5, and 1.6 per cent, respectively.

In March, the month of maximum em-

ployment, 26,745 wage earners were reported, and in July, the month of minimum employment, 12,346—the minimum representing 46 per cent of the maximum. The average number employed during the year was 16,898, as compared with 26,296 in 1919, and 22,815 in 1914.

Summary of Census.

The statistics for 1921, 1919, and 1914 are summarized in the following statement. The figures for 1921 are prelimiand subject to such change and correction as may be necessary from a further examination of the original reports.

No	†1921	†1919 584	†1914
No. establishments.	588		734
Persons engaged	21,438	32,522	28,301
Proprietors and			
firm members	164	219	373
salaried employes	4,376	6,007	5,113
Wage earners			
(aver. No.)	16,898.		22,815
Salaries and wages.\$	25,845,500	\$36,934,700	\$17,774,400
Salanias	0 910 900	11 571 600	7 949 400

Salaries 9,819,800 11,571,600 7,242,400 Wages 16,025,700 25,363,100 10,532,000 P a i d for contract work 59,300 171,300 192,900 Cost of materials 144,978,300 281,143,600 153,196,100 \$\text{Value of products...180,374,800} 281,143,600 153,196,100 \$\text{Value added by manufacture} \times 35,396,500 95,103,100 45,241.500

†Statistics for establishments with products valued at less than \$5,000 are not included in the figures for 1921. There were 18 establishments of this class which reported 20 wage earners and products valued at \$64,000. For 1919, however, data for 16 such establishments, reporting 18 wage earners and products valued at \$47,880; and for 1914, data for 50 establishments, 73 wage earners and products to the value of \$140,000 are included in the figures with the exception of the item "number of establishments."

Detailed Statistics.

Detailed statistics of products for the years 1921, 1919, and 1914, are given in the following table. The figures include all products of the establishments primarily engaged in the manufacture of fertilizers, and also the fertilizers refertilizers, and also the fertilizers re-ported as subsidiary products by establishments assigned to other classifications.

	1921	1919	1914
Total value of products	\$188,192,700	\$306,523,900	\$169,017,600
Fertilizer industry	180,374,800	281,143,600	153,196,200
Fertilizers—Subsidiary products of other industries	*7.817.900	25,380,300	15,821,400
	5,992,633	8,237,011	8,432,206
Fertilizers, tons		\$284.544.500	\$153,260,200
Average unit value, tons	\$29.18	\$34,50	\$18.20
	3,483,704	5.831,767	4,483,607
Superphosphates, total. tons	1,976,317	2,515,281	1,760,290
†For sale, tons	000 MOO 100	\$50,050,300	\$16,145,600
Value	1,506,962	3.316.486	2,723,317
Made and consumed, tons	2,984,494)	0,010,100	2,120,011
Complete fertilizers, tons		4,756,440	5,612,421
	\$112,760,800	3,100,110	0,012,121
Ammoniated fertilizers, tons	339,190	\$200,106,400	\$121,676,400
Value	\$10,138,900 \$	\$200,100,400	\$121,616,400
Commercial (so-called) fertilizers, tons	209,844	007 000	1 070 405
Value	\$5,209,100	965,290	1,059,495
Other fertilizers, tons	482,788		
	\$13,139,300	\$34,387,800	\$15,438,200
Value	44.484	47.542	62,930
Fish scrap, tons	\$1,712,000	\$3,170,700	\$1.915,500
Value		2.118.092	2,445,026
Oil, gallons	2,334,622		\$778,300
Value	\$674,400	\$1,831,200	41.054.769
Bone black, pounds	41,238,653	44,597,838	
Value	\$3,141,600	\$2,227,100	\$1,413,200
Glue, value	\$1,248,400	\$2,171,100	\$1,131,300
Grease, value	\$370,700	\$2,015,000	\$1,209,300
Sulphuric acid, basis 50° Be'-		4 000 004	4 408 800
Production, tons	1,309,420	1,877,394	1,405,768
For sale, tons	174,508	308,817	129,053
Value		\$3,639,000	768,900
Made and consumed, tons	1,134,917	1,568,577	1,276,715
‡All other products	\$4,336,500	\$6,925,300	\$8,540,900

^{*}Includes fertilizer products reported by 58 cottonseed oil mills; 41 grease and tallow rendering establishts; 121 slaughtering and meat packing plants; and 19 establishments distributed among 10 other ents; 121 slaughtering and meat packing plants; and 19 establishments distributed among 10 othe dustries.
†Includes concentrated phosphates—1921, 18,207 tons; 1919, 119,609 tons; and 1914, 67,595 tons.
†Includes chemicals, acids, etc., to the value of \$681,522 in 1921; \$1,039,068 in 1919; and \$450,597 in 1914.

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Lard and Hog Statistics for Last Year

Final statistics for lard production, consumption, stocks on hand for the year of 1922 as well as that of previous year show some striking features which are of paramount importance to various markets. The first one is a record production amounting to 1,567,824,395 lbs. as against a production of 1,430,597,521 in the previous year, or an increase in production for the year of over 137,000,000 lbs., equivalent to approximately 350,000 tierces.

During 1921 over 60 per cent of the lard produced in this country was exported and as a matter of fact for years the largest part of our lard production has been exported and it is therefore apparent that prices obtainable for this product in Europe are of vital interest not only to the lard packer and the hog producer but equally to the cotton oil manufacturer, as the largest amount of cotton oil produced is sold in the shape of lard compound in

competition with hog lard.

The figures for 1922 show that ex-The figures for 1922 show that exports, instead of increasing as they should over 1921 in proportion to the increased production, show just the contrary. They indicate exports for 1922 of only 787,447,-109 lbs. as against exports of 892,892,358 lbs. for the year of 1921. In other words as against over 60 per cent of the lard production having been exported during 1921 it indicates that the amount exported during

duction having been exported during 1921 it indicates that the amount exported during 1922 has dropped to 50 per cent.

Why Decrease in Exports.

The reason for this decrease in lard exports is pointed out in an interpretative way by Aspegren & Co., Inc., of New York, as follows:

as follows:
Since the tariff on oriental oils was promulgated in this country it not only killed off our exports of cotton oil but is now seriously interfering with the lard exports, which in its turn will again hit the cotton (Continued on page 49.)

1922 LARD AND HOG STATISTICS.

The following figures have been compiled from the official government statistics and are of special interest to packers:

(A) (1) ESTIMATED NUMBER OF HOGS ON THE FARMS IN THE UNITED STATES.

I MANAGES	TVA	TITIE	CHILDD BIAI	143.
		1923.	1922.	1921.
January 1	. 63.	424,000	57,834,000	56,097,900
February 1			49,626,000	50,128,000
March 1			50,229,000	47,632,000
April 1			59,714,000	54,150,000
May 1			66,167,000	63,636,000
June 1			68,959,000	67,894,000
July 1			68,999,000	67,917,000
August 1			69,307,000	68,478,000
September 1			74,642,000	70,278,000
October 1			77,671,000	73,431,000
November 1			77,440,000	73,207,000
December 1			Note	66 150 000

(1) RECEIPTS OF HOGS AT PUBLIC STOCK YARDS, (68 Markets.)

	(00	MRIKELS.)	
		1922.	1921.
January .		4,278,178	4,700,096
February		3,612,757	4,008,903
			3,385,968
April		3,066,556	3,229,525
			3,328,011
			3,578,830
			2,726,648
			2,656,149
September	*********	3,062,185	2,655,404
October .		3,682,491	3,214,139
November			3,686,526
December			3,930,790
m		44 007 400	44 400 000

Note—December 1, 1922, figures not available.

(A) These estimates are based upon monthly returns of about 10,000 live-stock producers. The ratios obtained from these reports are applied to the total numbers as reported by the census taken by the Bureau of the Census Jan. 1, 1920, indicating changes as above.

s above.
(1) Source: Bureau of Agricultural Economics. HOGS SLAUGHTERED UNDER FEDERAL INSPEC-TION IN THE UNITED STATES.

			1	(:	2)	20	31	ı	ı	15	z)	h	t	eı	red	-Number. 1922.	1921.
January			,							*							3,984,704	4,347,306
February March																	3,479,907 $3,350,214$	3,770,974 $3.075,137$
April																	2,945,757	3,003,290

35		
	9 710 170	0.074.114
May	3,716,170	3,274,114
June	4,046,304	3,618,152
July	3,094,322	2,820,616
August	2,887,755	2,530,459
September	2,747,467	2,422,350
		2,422,000
October	3.304.516	2.866.133
November	4.345.076	3,447,027
December	5,201,437	3,806,798
Total	49 109 690	90 000 950
Total	43,103,629	38,982,356
(3) Average Live V	Taight Day	nde
(3) Average Live v	eight-Pon	nus.
	1922.	1921.
-		
January	224.33	227.28
February	222.21	227.89
March	221.99	227.70
April	224,71	225.56
	226,48	220.61
May		
June	231.31	223.05
July	239.39	245.63
August	241,50	234:05
September	234.25	228.36
October	219.47	223.24
November	214.83	215.59
	220.07	229.50
December	220.01	220.00
(3) Average Dressed	Weight-P	ounds.
	1922.	1921.
*		
January	173.92	171.17
February	170.72	176.25
March	170.09	174.44
April	172.76	173.65
May	173.43	171.27
		171.18
June		
	178.11	
July		
July	183.26	187.73
August	183.26 182.11	187.73 178.49
	183.26 182.11 177.71	187.73
August	183.26 182.11 177.71	187.73 178.49 174.22
August September October	183.26 182.11 177.71 165.72	187.73 178.49 174.22 167.69
August	183.26 182.11 177.71 165.72 162.51	187.73 178.49 174.22 167.69 164.67
August	183.26 182.11 177.71 165.72 162.51	187.73 178.49 174.22 167.69 164.67
August September October	183.26 182.11 177.71 165.72	187.73 178.49 174.22 167.69
August	183.26 182.11 177.71 165.72 162.51 169.52	187.73 178.49 174.22 167.69 164.67 168.67
August September October November December	183.26 182.11 177.71 165.72 162.51 169.52 Per 100	187.73 178.49 174.22 167.69 164.67 168.67
Angust September October November Lecember (3) Average Yield of Lard	183.26 182.11 177.71 165.72 162.51 169.52 Per 100 ounds.	187.73 178.49 174.22 167.69 164.67 168.67 Pounds Live
August September October November December (3) Average Yield of Lard Weight—P	183.26 182.11 177.71 165.72 162.51 169.52 Per 100 ounds.	187.73 178.49 174.22 167.69 164.67 168.67 Pounds Live
August September October November December (3) Average Yield of Lard Weight—P	183.26 182.11 177.71 165.72 162.51 169.52 Per 100 ounds.	187.73 178.49 174.22 167.69 164.67 168.67 Pounds Live
August September October November December (3) Average Yield of Lard Weight—P	183.26 182.11 177.71 165.72 162.51 169.52 Per 100 ounds. 1922. 16.85	187.73 178.49 174.22 167.69 164.67 168.67 Pounds Live
August September October November December (3) Average Yield of Lard Weight—P January February	183.26 182.11 177.71 165.72 162.51 169.52 Per 100 ounds. 1922. 16.85 16.92	187.73 178.49 174.42 167.69 164.67 168.67 Pounds Live
August September October November December (3) Average Yield of Lard Weight—P	183.26 182.11 177.71 165.72 162.51 169.52 Per 100 ounds. 1922. 16.85 16.92	187.73 178.49 174.22 167.69 164.67 168.67 Pounds Live 1921. 14.10 15.56 16.30
August September October November December (3) Average Yield of Lard Weight—P January February March	183.26 182.11 177.71 165.72 162.51 169.52 Per 100 ounds. 1922. 16.85 16.92	187.73 178.49 174.42 167.69 164.67 168.67 Pounds Live
August September October November December (3) Average Yield of Lard Weight—P January February March April	183.26 182.11 177.71 165.72 162.51 169.52 Per 100 ounds. 1922. 16.85 16.92 16.97	187.73 178.49 174.42 167.69 164.67 168.67 Pounds Live 1921. 14.10 15.56 16.30 15.81
August September October November December (3) Average Yield of Lard Weight—P January February March April May	183.26 182.11 177.71 165.72 162.51 169.52 Per 100 ounds. 1922. 16.85 16.92 16.97 17.17 16.78	187.73 178.49 174.22 167.69 164.67 168.67 Pounds Live 1921. 14.10 15.56 16.30 15.81
August September October November December (3) Average Yield of Lard Weight—P January February March April	183.26 182.11 177.71 165.72 162.51 169.52 Per 100 ounds. 1922. 16.85 16.92 16.97	187.73 178.49 174.42 167.69 164.67 168.67 Pounds Live 1921. 14.10 15.56 16.30 15.81
August September October November December (3) Average Yield of Lard Weight—P January February March April May June	183.26 182.11 177.71 165.72 169.52 1 Per 100 ounds. 1922. 16.85 16.92 16.97 17.17 16.78	187.73 178.49 174.22 167.69 164.67 108.67 Pounds Live 1921. 14.10 15.56 16.30 15.81
August September October November December (3) Average Yield of Lard Weight—P January February March April May June July	183.26 182.11 177.71 165.72 162.51 169.52 Per 100 ounds. 1922. 16.85 16.92 16.97 17.17 16.78 16.45 16.45	187.73 178.49 174.22 167.69 164.67 168.67 Pounds Live 1921. 14.10 15.56 16.30 15.81 16.60 16.19
August September October November December (3) Average Yield of Lard Weight—P January February March April May June	183.26 182.11 177.71 165.72 169.52 1 Per 100 ounds. 1922. 16.85 16.92 16.97 17.17 16.78 16.45 16.45	187.73 178.49 174.22 107.69 164.67 108.67 Pounds Live 1921. 14.10 15.56 16.30 15.81 16.89 16.22 16.22
August September October November December (3) Average Yield of Lard Weight—P January February March April May June July August	183.26 182.11 177.71 165.72 169.52 1 Per 100 ounds. 1922. 16.85 16.92 16.97 17.17 16.78 16.45 16.45	187.73 178.49 174.22 107.69 164.67 108.67 Pounds Live 1921. 14.10 15.56 16.30 15.81 16.89 16.22 16.22
August September October November December (3) Average Yield of Lard Weight—P January February March April May June July August September	183.26 182.11 1177.71 165.72 162.51 169.52 Per 100 ounds. 1922. 16.85 16.92 16.97 17.17 16.78 16.45 16.04	187.73 178.49 174.22 167.49 164.67 168.67 Pounds Live 1921. 14.10 15.56 16.30 16.81 16.82 16.24 16.24
August September October November December (3) Average Yield of Lard Weight—P January February March April May June July August	183.26 182.11 177.71 165.72 162.51 169.52 1 Per 100 ounds. 16.85 16.92 16.97 17.17 16.78 16.45 16.45 16.45 16.26	187.73 178.49 174.22 167.49 164.67 168.67 Pounds Live 1921. 14.10 15.56 16.30 16.90 16.90 16.11 16.22 16.24 15.58
August September October November December (3) Average Yield of Lard Weight—P January February March April May June July August September October	183.26 182.11 177.71 165.72 162.51 169.52 1 Per 100 ounds. 16.85 16.92 16.97 17.17 16.78 16.45 16.45 16.45 16.26	187.73 178.49 174.22 167.49 164.67 168.67 Pounds Live 1921. 14.10 15.56 16.30 16.90 16.90 16.11 16.22 16.24 15.58
August September October November December (3) Average Yield of Lard Weight—P January February March April May June July August September October November	183.26 182.11 177.71 165.72 162.51 169.52 Per 100 ounds. 1922. 16.85 16.92 16.97 17.17 16.78 16.44 15.45 16.56 16.26 14.99	187, 73 178, 49 174, 22 167, 49 164, 67 168, 67 Pounds Live 1921. 14, 10 15, 56 16, 30 16, 81 16, 82 16, 24 15, 58 14, 79 15, 42
August September October November December (3) Average Yield of Lard Weight—P January February March April May June July August September October	183.26 182.11 177.71 165.72 162.51 169.52 1 Per 100 ounds. 16.85 16.92 16.97 17.17 16.78 16.45 16.45 16.45 16.26	187.73 178.49 174.22 167.49 164.67 168.67 Pounds Live 1921. 14.10 15.56 16.30 16.90 16.90 16.11 16.22 16.24 15.58

(2) Source: Bureau of Animal Industry.(3) Source: Pureau of Agricultural Economics

LARD PRODUCED, CONSUMED AND STOCKS ON HAND—POUNDS.

(B) (4) Produced.

On hand beginning of season: 1922.	1921.
January 145,409,330	149,970,988
February 129,177,087	140,640,726
March 128,885,910	123,130,369
April 116,073,895	119,374,681
May 130,765,619	121,463,699
June 152,192,593	135,735,408
July 122,697,674	117,322,212
August 113,614,511	97,904,454
September 106,646,413	91,700,746
October 113,464,887	98,403,666
November	109,793,188
December 170.806.126	125, 157, 384

CONSUMED. (C) (5) Exports

(0) (0) 12	Aports.	
On hand beginning of season:	1922.	1921.
January	74,473,491	79,809,679
February	78,090,853	94,684,872
March	65,633,191	83,683,496
April	43,729,488	54,438,565
May	51,992,595	51,307,473
June	58,957,437	69,892,992
July	68,246,333	84,800,034
	70,600,140	90,026,807
August		
September	62,718,034	107,529,930
October	68,094,971	58,070,143
November	63,798,906	52,592,785
December	81,111,670	66,055,582
Total	787,447,109	892,892,358
(D) Dom	nestic.	
On hand beginning of season:	1922.	1921.
January	57,275,458	45,930,729
February	50,990,638	11.814.732
March	38,519,235	28,523,367
April	62,320,408	41,122,168
May	51,030,099	40,592,008
June	62,778,977	43,533,133
July	65,621,553	42,333,108
August	66,343,041	52,482,534
September	88,345,666	48,941,312
October	83,957,117	76,598,445
November	78,535,443	64,049,267
		53,561,763
December	73,393,208	33,301,103
Total	779,110,843	549,482,566
Tota		
On hand beginning of season:	1922.	1921.
January	131,748,949	125,740,408
February	129,081,491	106,499,604
March	104,152,426	112,206,863
April	106,049,896	95,560,733
May	103,022,694	91,899,481
June	121,736,414	113,426,125
July	133,867,886	127,133,142
August	136,943,181	142,509,341
September	151,063,700	156,471,242
October	152,052,088	134,668,588
November	142,334,349	116,642,052
December	154.504.878	119,617,345
	101,001,010	220,021,030

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																				1922.	1921.
On ban	d	b	e	ĸ	iı	11	ni	U	g		0	f	8	ie.	2	18	36	10	1	47,541,270	59,318,673
Januar:	r																			61,201,651	83,549,253
Februa																				61,297,247	117,690,37
																				86,030,731	128,613,88
April														٠				٠		96,054,730	152,427,829
May .																٠	٠			123,797,655	181,992,04
June .																				154,253,834	204,301,330
July																				143,083,622	194,490,400
August																				119,754,952	149,885,513
Septem	b	er													۰					75,337,665	85,115,01
October																				36,750,464	48,850,09
Novemb	pe	P								ì				ì		ì				32,506,465	42,001,23
Decemb																				48,807,713	47.541.27

(B) Includes entire production, both neutral and other edible by Federal Inspected plants and also production, both neutral and other edible, by plants not federally inspected, except a few small ones, but does not include production on the farms.

ooes not include production on the farms.

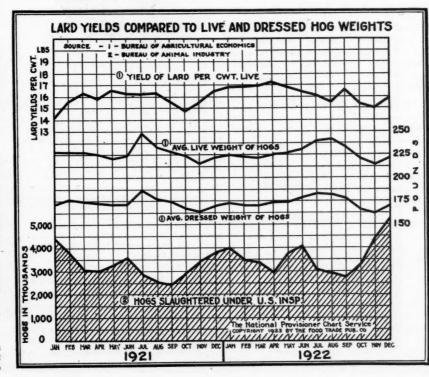
(C) Includes both neutral and other edible lard.

(D) Apparent consumption.

(E) Includes stocks held in cold storage plants and packing house plants only.

(4) Source: Bureau of Agricultural Economics, Dept. of Agriculture.

(5) Source: Bureau of Foreign and Domestic Commerce, Dept. of Commerce.



The Packing Plant and Its Equipment

Packing Industry Lectures-No. 3

Progress of the meat packing industry and its development and expansion since the slaughter-house period, prior to the Civil War, was outlined by Arthur Cushman, of Chicago, Chairman of the Plan Committee on Practical Research of the Institute of American Meat Packers, who addressed more than 700 packing plant employees at Mandel Hall, University of Chicago, on Tuesday evening, February 27.

Mr. Cushman's lecture on "The Packing Plant and Its Equipment" was the third of a series of eight lectures being given under the joint auspices of the Institute Plan Commission of the Institute of American Meat Packers and the School of Commerce and Administration of the University of Chicago.

Mr. Cushman's lecture was a remarkably clear and interesting exposition of his subject. He delivered it in a manner that held the attention and interest of an audience that filled the hall, and that left them wishing for more.

The lecture was well illustrated with diagrams and photographs which served to stress significant changes in methods and operations through the introduction of mechanical refrigeration, labor saving devices, modern construction, machinery and industrial chemistry.

"Prior to the period of natural-ice refrigeration, beginning about 1870, meat packing was a winter business," Mr. Cushman said. "Compared with present day standards, packing-house methods at the beginning of this period were crude indeed. Muscle and brawn were the prime requisites of the butcher.

"It would seem to some of us that the packers of the seventies had rather an easy time, but investigation shows them working in their plants from dawn to sundown using candles and lamps to light the darkened rooms. Electric lights had not yet been put into common use. There were no telephones, no typewriters or stenographers. Theirs was a great responsibility and they seemed to sense the importance of it.

Early Plants Had No Standards.

"No standards had been set for the designing and building of packing plants. Ice houses for the storage of natural ice in many cases occupied more than one-half of the area of the plant. The insulation of the walls of refrigerated buildings was accomplished either by building parallel brick walls, each from one to two feet thick, with an eight or ten inch air space between them, or by furring the inside of the wall, sheathing with wood, and filling the space so formed with dry wood shavings or saw dust."

Hog Scraper the Key Machine.

Mr. Cushman sketched the progressive applications of mechanical refrigeration to the packing industry from the experimental stages to the present day of efficient refrigerating machines and controlled temperatures. Likewise, he sketched the development of the hog-scrap-

ing machine, to which he pointed as "the key machine in the pork department," and added: "As there is little-special machinery in the beef department, it might be said that it is the most important machine in any of the major departments of the entire plant, exclusive, of course, of motive power and refrigeration."

Contrasting the period of natural-ice refrigeration with the present one of mechanical refrigeration, beginning about 1870, the speaker pointed out that "trained men, engineers and chemists found favor with the packer, and contemplated improvements were studied from the scientific, as well as the practical point of view"

"Engineers and packinghouse mechanics," continued Mr. Cushman, "have made improvements in mechanical equipment too numerous to mention. Today the plant superintendent is expected to have a general knowledge of mechanical engineering. Formerly, many a dollar floated out of the smoke-stack, while pennies were



ARTHUR CUSHMAN

being picked up on the killing floor. New equipment is purchased upon the basis of its efficiency rating instead of the basis of competitive prices.

"With the exception of the specialty and by-products departments, there is a surprising scarcity of automatic equipment in the packing plant. The very nature of the raw material, as well as its construction and size, makes treatment with automatic or special machinery difficult, but we are quite accustomed to seeing what seems to be the impossible become an actuality, and we can look forward with confidence to further improvements in the development of automatic equipment applicable to every department of the plant. Here still lies a very fertile field for the mechanical genius."

CONVERTING CATTLE INTO FLOUR.

One solution to the problem of the tremendous surplus of beef in Australia and New Zealand has been offered, and initial efforts appear to have been along the right lines. Declining world markets for this cattle have resulted disastrously, and reports to the Department of Commerce

tell of Australia's effort to convert surplus cattle into cash.

Meat flour is being manufactured just as successfully as milk flour is being made in this country. By a special process of drying and grinding, a meat flour is produced that keeps indefinitely and contains all the body building and nutritive value of the fresh meat, and at a cost which permits easy retailing.

The flour is really next to raw meat, for during the process the meat is not cooked but dried at a very low temperature, and all that is actually lost during the process is about 60 per cent of water and the deterrent properties. During the drying the meat is squeezed and all the fats, blood and juices are expressed, which are then treated, all deterrent properties are destroyed and after the final treatment the juices are placed back with the meat. The whole is then dried and during the process the various gasses allowed to escape.

That which has been the cause of failures of many experiments for the past fifty years has been removed in this new Remus process. Owing to its fine form, meat flour can be cooked quicker than ordinary meat and has an economical advantage in the saving of time and fuel.

Australian meat growers have acknowledged that South American competition has proven a body blow to the island continent's frozen meat trade and it is believed that they will be interested in establishing meat flour works and exporting this product to the Far East and other markets.

STUDIES OF HOG MARKETING COSTS.

About one-third of the total cost of marketing hogs by co-operative shipping associations consists of terminal charges, such as commission, vardage and feed, the United States Department of Agriculture has learned in a cost of marketing study in the Corn Belt. Commission comprised about 50 per cent of the terminal charges, yardage about 26 per cent and feed 24 per cent. On the average the terminal costs at all markets for straight shipments ranged from \$1.60 to \$2.23 per 1,000 pounds, the average being about \$1.90 per 1,000 pounds. By individual associations the lowest cost was \$1.55 and the highest cost was \$2.63.

Losses from crippling were found to be heavier in November to March, inclusive, than during other months of the year. The loss on account of killed hogs was found to be greater in the spring months, particularly May and June, than in other months. Both crippled and dead hogs were more numerous in mixed shipments than in straight shipments.

A seasonal variation in shrinkage was also found, the highest percentage of shrinkage occurring in August. From July to October, inclusive, shrinkage is greater than for November to March. Although mixed shipments showed greater shrinkage than straight shipments, the department points out that this may simply indicate that the organizations shipping mixed cars were not as efficient as the others, or was due to the type of animal usually shipped in mixed cars.

The study consisted of data collected from 237 live-stock shipping associations in the 10 Middle Western States which shipped more than 600,000 hogs in 1921. The carload or shipment was the unit used. A detailed report of the study is contained in a mimeographed pamphlet, entitled Costs of Marketing Live Stock in the Corn Belt—1921, copies of which may be obtained upon request of the United States Department of Agriculture, Washington, D. C.

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The Plain Truth

Let's do away with fancy words and face the plain, naked truth.

What is needed most in the packinghouse?

It's "EDUCATION!"

Why?

Because there are hundreds of the smaller packers today who operate plants without knowing exactly the yields and returns of a good many of their products.

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Let's cite an example which will hit your pocketbook: What is your shrinkage on hides? Can you give the figures exactly? How do you know that you are not losing two, three or even five per cent on your shrinkage? What does it mean to you in dollars and cents if you lose only two per cent on your shrinkage?

Information like this is worth thousands of dollars to any packer, and it is only ONE good reason why "THE PACKERS' ENCYCLOPEDIA" should be on your desk.

We may all be smart, but no one knows it all, and the experience of many people in the business can always help us.

Better order your copy now before it is too late. Chapter One:—CATTLE
Breeds of Cattle
Market Classes and Grades of
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Dressing Percentages of Cat-

Market Classes and Grades of Cattle and Calves Dressing Percentages of Cattle Beef Slaughtering Beef Cooling Beef Cooling Beef Loading Handling of Beef for Export Beef Cutting and Boning Plate Beef Manufacture of Dried Beef Manufacture of Dried Beef Handling Beef Offai Handling Beef Offai Handling and Grading Beef Casings Handling Miscellaneous Meats Manufacture of Oleo Products Tallow Handling of Hides

Handling of Hides
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Hog Killing Operations
Hog Cooling
Shipper Pigs
Pork Cuts
Curing Pork Cuts
Smokehouse Operation
Ham Boning and Cooking
Lard Manufacture
Hog Casings
Edible Hog Offal or Miscellaneous Meats
Preparation of Pigs Feet

Chapter Three: -SMALL

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STOCK
Market Classes and Grades
of Sheep and Lambs
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Casings from Calves and
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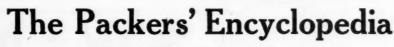
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THE NATIONAL PROVISIONER

Old Colony Building

CHICAGO



TRADE GLEANINGS

The slaughterhouse of Lee Graber, Massillon, O., was recently destroyed by fire.

W. V. Butcher is considering the erection of a packing plant at Loveland, Colo.
Boatwright & Rushing, Calvert, Tex.,
have opened a sausage manufacturing
plant recently.

The Gibson Packing Co., Yakima, Wash., is building a new packing plant to cost about \$150.000.

Plans are said to be under way for the organization of a company and erection of a packing plant at Pana, Ill.

The Kankakee Packing Company, Kankakee, Ill., has been incorporated and will increase its capital to \$75,000.

Barton & Co., West Spokane street and Wyoming avenue, Seattle, Wash., recently sustained a loss to its plant by fire.

The Rosenthal Packing Company, Galveston, Tex., is considering plans for the extension of the plant in the near future.

The Great Falls Meat Company, Great Falls, Mont., is planning considerable extensions, including a cold storage plant.

The Gem State Packing Company, Gooding, Ida., is planning to erect a new plant adjoining its slaughterhouse at a cost of about \$25,000.

The Manning Fertilizer Co., Manning, S. C., has been incorporated with a capital of \$5,000, with Charlton DeRant president and C. R. Sprott vice-president.

Fred B. Carter, the well-known packinghouse products broker, formerly at 100 Vine street, Philadelphia, Pa., has moved to new and larger guarters at 24 South Delaware street.

The Henry Daudistel Packing Company, Evansville, Ind., has been incorporated with a capital of \$30,000 and the following are the directors: Edward M. Daudistel, Arthur S. Daudistel and Walter L. Daudistel.

A. M. Eastman and others have organized the Eastman-Carpenter Packing Company, Lansing, Mich., with a capital of \$25,000. The officers of the company are as follows: A. M. Eastman, president; C.

A. C. Carpenter, vice-president, and Frank G. Carpenter, secretary-treasurer. Mr. Eastman will manage the company.

Messrs. Bennert and Schairer, both well known meat men of Detroit, Mich., have purchased the packing business formerly conducted by Adolph Gerisch at 10023 West Fort street, Detroit, and will operate it under the name of the Gerisch Company, continuing to manufacture the well known Gerisch brand of fresh, smoked and summer sausage.

The D. E. Nebergall Meat Company, Albany, Ore., is planning extensive improvements. The officers elected for the following year are as follows: D. Nebergall, president; Harry Nebergall, vice-president; A. R. Tartar, secretary. Those present at the meeting were H. W. Barker, Rex Davis, Morris Senders, R. A. Hudkins, W. R. Hudkins, F. E. Callister, D. E. Nebergall, Harry Nebergall, A. R. Tartar, and F. H. Pfeiffer.

DEATH OF JOSEPH H. NASH.

Joseph H. Nash, secretary treasurer of the Cleveland Provision Company, Cleveland, O., died on February 21, 1923, at the age of 60 years following an operation for appendicitis. Mr. Nash had been ill only a few days.

Mr. Nash had been an officer of the Cleveland Provision Company since he went to Cleveland some 11 years ago. His father, John Nash, had been one of the founders.

He is survived by his widow, Mrs. Flora C. Nash, and six brothers. Samuel T. Nash, one brother, is president of the provision company.

Born in Chicago, his father's business took him to Nebraska and he took up residence in Central City, where he became cashier of the Central City bank and later its vice president.

In 1893, his father went to Cleveland to associate himself with the long-established firm of Rose & Prentiss, later the Cleveland Provision Company.

On the death of Benjamin Rose in 1909, Samuel T. Nash became president of the company and shortly thereafter Joseph H. Nash went to Cleveland.

VOGT FARM MEAT PRODUCTS PLANT.

On January 16 a stockholders' meeting was held at the new plant of the Vogt Farm Meat Products Co., Royalton, Pa., and Mr. Guy S. Vogt, the all-round hustler, was elected president of the company.

On the same day the stockholders had an opportunity to see the hog-killing department in its first run. There is a "Boss" hog scraper No. 10X installed in this department, and the operation of this hog scraper was quite a surprise to the people who visited the plant that day, as 101 hogs were run through this machine in less than one hour, coming out perfectly clean.

The refrigerating machines and the ice manufacturing plant were also in operation for the first time and ran satisfactorily. The rest of the plant is not yet finished, but if everything goes the way it is mapped out, the entire plant will be in operation in about six weeks.

The greater part of the packinghouse machinery was purchased from the Brecht Company and has proven satisfactory. The installation of the machinery for the packinghouse was in the hands of Mr. Andrew Kaeslin of Kaeslin Bros., in Baltimore.

Mr. Jos. Himmelsbach is acting as consulting engineer and architect of this plant, having designed it, and everyone present congratulated him upon its fine layout, its economy and particularly its sanitation.

When this plant is completed it will be one of the finest packing houses in the vicinity of Harrisburg and will be a recommendation to the consulting engineer and architect and also to the president, Guy S. Vogt.

The capacity of this plant is three carloads of hogs per day and two carloads of cattle. Sheep and calves will also be slaughtered during the proper seasons. The plant is located in an ideal spot near the Susquehanna River and has direct connection with the Pennsylvania railroad through a private siding. The stockyard is also located near by, having railroad facilities.

Mr. Himmelsbach started to design this work under his own name, but is now connected with Himmelsbach & Schlich, consulting engineers and architects, specializing in the design of packing houses and allied industries.

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A simple process—boils with exhaust steam. Repairs practically negligible. Better investigate.

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THE NATIONAL PROVISIONER

Chicago and New York

Official Organ Institute of American Meat Packers and the American Meat Packers' Trade and Supply Association

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Bureau Inspectors' Overtime

In its failure to enact appropriate legislation to enable the Bureau of Animal Industry to assume the overtime paid to its inspectors located at packing establishments, Congress shows little regard for one of the principles urged by the late Theodore Roosevelt at the time of the meat inspection agitation. This was his insistence that the cost of the inspection service should be borne by the Government, since it was designed for the benefit of the general public.

A "joker" was inserted in the appropriation bill of July 24, 1919, which authorized the Secretary of Agriculture, in his discretion, to pay overtime and to accept reimbursement from the packers. This has continued in effect although Congress last year passed a bill designed to remedy it. This bill failed to provide any appropriation for its enforcement, so that this furnished a ready excuse for giving it a "pocket veto."

The department thereupon agreed to include an additional amount in its appropriation bill so as to take care of all overtime. Meanwhile the economy wave had swept through the governmental bureaus and it is claimed that any additional appropriations might necessitate an increase in taxes, hence they must forego that plan.

From figures collected from its membership the Institute of American Meat Packers estimates that inspected establishments paid last year almost a quarter of a million dollars in this overtime. This is a tax laid directly upon those concerns which seek to operate under federal inspection.

Moreover, it is an additional handicap under which inspected concerns must labor in their competition with noninspected establishments. It is an injustice that should be corrected immediately, or many establishments may find it convenient to surrender federal inspection.

The Secretary of Agriculture is conversant with these facts and recommended that the Government pay all overtime. His capable chief of the Bureau of Animal Industry must recognize the need for this relief. The department should insist upon an immediate change of policy.

Moreover, inspectors should not be permitted to abuse the privilege by rearranging their working hours so as to draw the maximum of overtime. All the Institute asks is a literal compliance with the pledge made by the Government in 1906, when it was said by the late Dr. Melvin that "within reason it (the bureau) will require its men to work as long as his

(the packer's), to begin as early, and to continue as late."

Important Meat Vitamin Study

From the point of view of the meat industry one of the most important pieces of research undertaken recently by the U. S. Department of Agriculture has just been published on vitamins in ox, sheep and hog.

This scientific study is of special interest because while meat, one of our most important foods, has been assigned a rather low value as a source of vitamins, according to experiments made by the United States Department of Agriculture, various kinds of lean meat and the edible organs of cattle, sheep and hogs have been found to contain varying quantities of vitamin B, also known as the antineuritic

This vitamin is not to be found in some other foods. For example it is the deficiency of this vitamin in polished rice that causes the disease beriberi among people living largely on a rice diet. The disease can be cured by a ration of unpolished rice. It would, of course, be cured by a ration containing a meat with this vitamin.

Among other experiments showing the good work of meat in making up this deficiency in other foods was one made with pigeons. A pigeon suffering with acute polyneuritis, showed lack of control of muscles in its wings, legs and neck. But only twenty-four hours later, after having been fed 15 grams of dried smoked ham, the bird, while still a trifle unsteady on its feet, showed no acute symptoms of the

As for the general conclusions they can be summarized as follows:

1. Meat may be regarded as an important source of Vitamin B in the diet. Pork in particular—that is, the lean meat is rich in this vitamin, comparing favorably in this respect with liver and kidney, organs heretofore recognized as containing an abundance of Vitamin B. Beef appears to contain a much smaller proportion of the vitamin, while mutton occupies an intermediate position.

2. Several of the internal organs are particularly rich in Vitamin B. The heart appears to be the richest in the vitamin, but the liver and kidney have only slightly lower values. The other organs contain smaller quantities of the vitamin. This class of products is an important and economical source of Vitamin B.

These are in line with the facts that the meat industry itself is trying with substantial success to bring before the general public. It is therefore especially gratifying to find that an independent authority has made a thorough study of the subject also and has come to the same

highly significant conclusions.

PRACTICAL POINTS FOR THE TRADE

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Making Wienerwurst

A sausage-maker in Ohio asked for formulas and full description of methods for making fresh pork sausage, smoked sausage, wienerwurst and liver pudding.

"The Packers' Encyclopedia" contains formulas for a variety of all these products. In addition THE NATIONAL PRO-VISIONER has published on this page in recent issues formulas and full operating directions for making fresh pork sausage and frankforts, as well as many other varieties of sausage product.

In further response to this inquirer, and for the benefit of other sausage-makers, information is given here on the making of wienerwurst, together with a standard for-

Formula.-Following is the meat and spice formula:

Meat:

60% fresh beef chucks or bull meat. 20% fresh pork cheek meat.

20% fresh regular pork trimmings.

100%

Spices:

3 lbs. salt.
6 oz. ground white pepper. 2 oz. nitrate of soda or saltpeter.

oz. ground coriander.

oz. ground nutmeg or mace.

oz. granulated sugar.

Cereal is optional.

Grinding and Mixing.—Grind beef chucks or bull meat and pork cheeks through 1/4-in. plate, and regular pork trimmings through 1-in. plate of hasher. Weigh meats in proper proportions and put beef in silent cutter and chop about 2 minutes, gradually adding crushed ice to keep meats cool while chopping. Then add pork cheeks and chop about 1 minute additional. Then add pork trimmings and spices, and chop all together about 5 minutes additional.

The man operating the chopping machine must use judgment in the use of all the crushed ice that meats will absorb, but not to use an excessive quantity; or in other words, do not drown the meats. The above formula should carry 40% crushed ice if properly handled. The ice is necessary to get the consistency and quality de- well cooled. This is to prevent shriveling. sired in the chopping process.

After meats are thoroughly chopped. take to mixer and mix for about 3 minutes. so that the spices will be evenly distributed through the meats.

Stuffing.-Then take to the stuffing machine and stuff in either sheep or hog casings. Sheep casings should be linked off about 5" in length, and hog casings about 4" in length. Casings must be stuffed to full capacity and punctured while stuffing to prevent air pockets showing in finished

The stuffing bench should be provided with a pan to accommodate scrap meat. and another pan for scrap casings. But do not, under any circumstances, mix the two together. This is very frequently done by careless workmen. The scrap meat on the bench must be handled promptly and mixed with the meat stock in the truck, and not allowed to remain on the bench indefinitely to deteriorate.

The stuffing bench should be provided with linking blocks, so that the linking will be uniform.

Cooling.-When the product is stuffed and hung on the truck, put in the cooler at 36° to 40° temperature. Carefully spread on trucks, trolleys or hanging sections and allow to hang in the cooler over night, so that meat will cure in the casings, and develop a much better and more lasting color on the finished product.

Smoking.-Then move from the cooler to smoke house, and carefully spread in the smoke house so that the product does not touch. Smoke with either dry hard wood or hardwood sawdust and gas. Hang product in smoke house at a temperature of 115° to 120° for about 30 minutes, or until casings are thoroughly dry. Then gradually raise the temperature of the smoke house to 160° to 170° for about oneand-one-half hours, or until the proper color is obtained.

When the product is smoked, avoid delays between smoke house and cooking vat, as sheep casings are susceptible to draft and will shrivel or wrinkle, which is very objectionable to the trade.

Cooking.-Then cook for about 5 to 7 minutes-depending on the size of the casing-at a temperature of 165° to 170°. As soon as the product is removed from the cooking vat, spray it with cold water for about 5 minutes, or until the sausage is

Then it is advisable to hang in natural temperatures for from 2 to 3 hours, where there is absolutely no draft, to allow the product to partially chill and develop color.

Then put in the cooler at a temperature of from 40° to 45° for further chilling before packing. Product must not be packed warm, as it will slime and mold, especially in cartons.

[EDITOR'S NOTE.—Formula and operating directions for making liver sausage will be given on this page in an early issue, in reply to the request of this same inquirer.]

Curing Pickle and Chlorine

A small curer in the Southeast who takes pride in his product, and has been having success with it, wonders if the chemicals used in city water will have any effect on the flavor of the meats when city water is used to make pickle. In his town the city water has been strongly impregnated with chlorine, used as a disinfectant, and he fears it may leave a taste in the meats. He says:

Editor The National Provisioner:

Will chlorine in city water have any effect on the flavor of sweet pickle hams. They use an awful lot of it here in the city water and we use this water for our pickle for meats. It has a bad flavor in the drinking water and I was wondering if it would have any effect on the flavor of our hams.

I make my pickle 60 degrees for light hams and 65 to 70 degrees for heavy hams. We cure them from 60 to 70 days, and bacon from 40 to 45 degrees for thirty days, and have had good luck with meats coming out with a delicious flavor.

We do not anticipate any danger in curing hams and bellies in city water with chlorine added. Chlorine is essential to purify the water. We know of a concern in western Virginia who have their own well and alternate between the well and city water for pickle formulas. This plant certainly enjoys an excellent reputation on cured meats.

The strength of the pickle used by the inquirer would indicate that his product is a very mild cure, or at least comes under the head of fancy brand meats, as far as the cure is concerned. We consider the strength of the pickle rather weak for curing bellies.

We might add that it is always a good practice to have the city water analyzed frequently. Even though chlorine is a purifier, there is always danger of solids in the water that might be injurious to the meats. However, meats are cured successfully with city water to which chlorine has been added, in various parts of the United States.

Packers who are seeking to strengthen their operating departments will find this a splendid time to do so. Not in years a spiendid time to do so. Not in years have so many high-class men been available, and at reasonable terms. Try a "Want" ad. in THE NATIONAL PROVISIONER and see what quick results you

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Figuring Cooler Rails

A packing house construction department employee who is a reader of THE NATIONAL PROVISIONER makes the following inquiry:

Editor The National Provisioner:

Can you tell me what is the number of lineal feet of rail required in the hot and storage beef coolers and hog hanging room coolers to determine the daily capacity of a packing plant?

He was told that experts considered it good practice to figure 3 lineal feet of rail for hot beef cooler for each carcass of beef; 21/2 feet in cold beef cooler for each carcass. The hog coolers should be figured 1 foot 4 inches for each hog. This spacing of carcasses will allow for good circulation of air, and is pretty well standard for packing houses, according to the expert to whom the question was referred.

Publication of this information brought this comment:

Editor The National Provisioner:
Referring to your item of recent date concerning number of lineal feet of rail required in the hot and storage beef coolers and hog hanging room coolers to determine the daily capacity of a packing plant. Our ideas do not coincide with the information printed

For the hot beef cooler we recommend 24 inches or 2 feet, and for the storage cooler 18 inches or 1½ feet of rail per carcass

carcass.

For the hog hanging room coolers we figure 100 light hogs to 100 feet of rail, or 12 inches of rail per head for light hogs averaging 220 lbs.; 14 inches of rail for medium weight hogs, 220@300 lbs.; 16 inches for hogs 300 lbs. and over; 18 inches for extremely heavy hogs.

There should be 28 inches of space between hanging rails. Of course the width of bay must be taken into consideration.

There are cases where an extra rail is frequently installed in the hog hanging room cooler, but this does not leave enough space between rails to properly handle and

space between rails to properly handle and chill hogs, and the result is that they are working under crowded conditions.

Four beef rails to six hog rails is gently forward to be the conditions.

erally figured. At least, this is my experience.

Yours respectfully.

SUPERINTENDENT.

[EDITOR'S NOTE.—If other superintendents or engineers have further suggestions to offer in this connection, THE NATIONAL PROVISIONER will be glad to print them.]

Waste and Sewage **Problems**

Saving every bit of pack-inghouse waste, including paunch manure, and turning it into a profitable product, sounds like a fairy tale. How it is done was told in a recent issue of THE NATIONAL PROVISIONER, and it has caused a lot of interest and discussion. The claim that the sewage problem is solved by this same method adds to the interest.

Reprints of the article describing this method may be had without charge, as long as they last, upon applica-tion to THE NATIONAL PROVISIONER, Old Colony Building, Chicago, Ill.

Stainless and Rustless Steel

Packers and lard refiners have had more or less trouble in the use of steel containers for lard and edible oils because of the discoloring effect of the metal on the product, and also because it sometimes gives the product a metallic flavor.

The discovery of a process of making steel which will do away with these troubles, and which will be both rustless and stainless, is told in the following letter:

Kansas City, Mo., Feb. 19, 1923.
Editor The National Provisioner:
Mr. F. C. Buchanan of El Paso, Tex., a mechanical engineer who has spent most of the last ten years on research work in Old Mexico, has discovered a new process for manufacturing what appears to be an absolutely stainless and rustless steel.

Some of this product has been in use for more than a year now for containing fruit juices (lemon, orange and grape), phenol, lactic acid and other chemical reagents which ordinarily attack steel very readily. Some of these containers hold five to six the present graphs and so for without were thousand gallons and, so far, without wear or stain to the metal. Exhaustive laboratory tests are being made with a view towards determining its effect upon all other reagents, and it is hoped to be impervious to corrosion in all

hoped to be impervious to corrosion in activation forms.

The principal involved is said to be one of complete impregnation, and involves the use of a new product known as akranium, which is found only in a remote section of Mexico. Recent archeological expeditions into Mexico have discovered the remains of a civilization research. covered the remains of a civilization re-puted to be more than ten thousand years old in this part of Mexico, and this discovery occurred in co-operation with the

or archeologists.

This will doubtless prove of especial interest to the packing industry, as it is well known that ordinary steel containers have a discoloring effect upon edible oil, lard, etc., also frequently giving it a metallic flavor. It is understood that this can be produced at a price very little above that of ordinary steel.

Yours respectfully,

JOHN P. HARRIS.

Cutting Beef on the Block

A retail meat cutter working for a Cincinnati butcher had a dispute with a fellow-employee concerning the proper method of cutting a hind quarter of beef on the

Both are old-timers in the business, yet they could not agree on the way to cut the hind, and they asked THE NATIONAL PROVISIONER to settle it. This is the letter:

Editor The National Provisioner:
Kindly send me your issues of January 8 and 15. I want them very much and have mislaid my copies.
We have an argument here in the shop on blocking beef. I say drop the loin from the block. The other fellow says drop the round from the block.
I have been dropping loins first for 28.

I have been dropping loins first for 28 years. The other fellow also is an old-timer in the business. We are looking to you to settle our question.

There is no question about the answer. Any retail expert will tell you that in dropping a hind quarter on the block the round should be dropped first, and particular care used in dropping the loin. The loin is the most valuable part of the hind quarter, and therefore requires more care to prevent bones from being broken, etc. This is the best practice everywhere.



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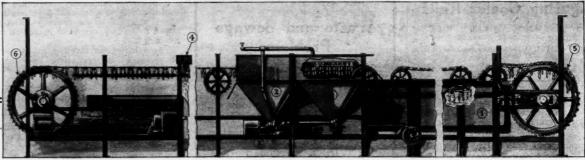
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Patent Applied For

The only successful mechanical system for cooking sausage, has been made possible by the invention of the "HETZEL CONTINUOUS SAUSAGE COOKER."

The following advantages have been successfully demonstrated over all other methods of cooking sausage:—

Continuous operation Economy in labor Positive uniformity of cooking Uniformity of color Reduced shrinkage No broken sausage

Concentrates the cooking of all sausage in a tank approximately 10 feet long, up to a capacity of 4000

pounds of frankfurters per hour. Any kind of sausage can be cooked—capacity varying according to kind.

Sticks are placed on a chain conveyor which carries same thru cooking tank, direct from cooking tank thru cold water spray, then thru hot water shower. The conveyor passes a sufficient distance beyond the hot water shower to permit sausage to dry off before being removed.

Conveyor mechanism is operated by a 3 horsepower motor and can be varied in speed according to kind of sausage being cooked.

For further Particulars, prices, etc. address

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189





The Curing of Meats Require Careful Preparation

In the curing of meat products the initial expense makes it absolutely imperative that all chances for failure in the process of curing be eliminated—and not the least chance for this failure lies in the proper selecting of the curing cask.

Dependable goods conservatively priced make Hauser-Stander products renowned the world over.

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PROVISIONS AND LARD

WEEKLY REVIEW

All articles under this head are quoted by the barrel, except lard, which is quoted by the hundredweight in tierces. pork and beef by the barrel or tierce and hogs by the hundredweight.

Prices Firm-Trade Light-Hog Receipts Large-Hog Prices Steady - Exports Fair.

The hog movement during the past week showed a big increase at the principal points, compared with the preceding week and compared with last year. The total amounted to 709,000, an increase of 220,000 over a year ago. There was also some increase in the cattle movement compared with last year, and an increase in the sheep movement. Toward the close of the week hog prices showed some decision but the grayers for the week not proved for the we cline, but the average for the week, not-withstanding the receipts, was only 5c lower per hundred, and the figure for the week was about ½c lower than the high

week was about ½c lower than the high level of the past month.

The average price for the week, however, was 3.45c lower than the past elevenyear average, 2.35c lower than last year, and lower than any year for the corresponding week in the past eleven years, excepting one week in 1915. The average of cattle was 95c per hundred higher than last year, while the average for sheep and

last year, while the average for sheep and lambs was somewhat lower.

The comparative figures for the livestock prices at Chicago with previous weeks follow:

				Hogs.	Cattle.	Sheep.	Lambs.	
Last	week			 .\$ 8.00	\$ 8.75	\$ 7.65	\$13.85	
Prev				. 8.05	8,85	7.65	13.90	
				. 10.35	7.80	8.30	15.40	
Cor.				. 9.50	8.75	6.00	10.00	
Cor.	week	1920		 . 14.30	12.55	13.55	19.70	
Cor.	week	1919		 . 17.52	16.00	12.50	18.25	
Cor.	week	1918		 . 16.85	12.40	12.35	16.60	
Cor.		1917		 . 13.35	10.55	11.50	14.00	
Cor.		1916		 . 8.85	8.50	7.90	11.00	
Cor.	week	191	5	 6.70	8.00	6.40	9.50	
Cor.	week	1914		 . 8.60	8,60	5.85	7.55	
Cor.	week	1913		 . 8.63	8,45	8.40	8.65	
				-				

Av. 1913 to 1922....\$11.45 \$10.15 \$ 9.15 \$13.05 Total Product May Be Too Big.

The fact that the average of hogs is keeping so low relatively is the answer to the free movement of livestock which has been going on and to the heavy packing operations which have been reported. The total packing operations are so much ahead of last year that there is beginning to be a little apprehension that the total will be a large, that it will be difficult to will be so large, that it will be difficult to take care of the product, although there is no evidence yet of such condition.

The comparative statement of the move-

ment for the month of January at sixty-nine markets shows total receipts of hogs nine markets shows total receipts of hogs at 5,306,000, against 4,278,000 last year, with local slaughter of 3,395,000, against 2,484,000; receipts of cattle 1,876,000, against 1,628,000 last year; slaughter 1,087,000, against 927,000 last year, and sheep receipts 1,636,000, against 1,835,000 last year, and slaughter 897,000, against 925,000 last year.

The January movement of cattle showed

The January movement of cattle showed an increase of 4.2% over the five year average, hogs an increase of 8.1% over five-year average and sheep a decrease of 1%. During the week ending February 10 the receipts at the principal markets were 721,472 hogs and the local slaughter

Extraordinary Lard Exports.

export movement of product, particularly lard, keeps up in an extraordinary way. The total for the past week amounted to 27,805,000 lbs., against 30,573,000 lbs. for the previous week. This tremendous export movement of lard to very important extent explains the relative firmness to the lard market, as repeatedly stated. Of the exports the past week of 27,805,000 lbs., there were 20,254,000 lbs., shipped to Germany, and the ship-

ments to the Continent amounted to about 23,200,000 lbs. out of the 27,800,000 lbs. shipped. The fact that Germany is able to take so much stuff, shows that a large part of the business must be financed through guilders or sterling, as the great-er irregularity of the marks makes such tremendous handicap in doing business with Germany.

Values of Farm Products.

The U.S. Department of Agriculture has issued a most interesting analysis of the values of farm products produced during the past year, and the comparison of values with previous years as well as the comparative value of all animal products. The figures in comparison follow in thousands (000 omitted):

1919.	1921.	1922.
Hogs\$2,230,000	\$1,091,000	\$1,228,000
All animals 4,158,000	2,137,000	2,293,000
Milk produced 1,859,000	1.567,000	1,357,000
Total dairy products, 2,960,000	2,352,000	2,090,000
Poultry products 1,100,000	932,000	884,000
Wool 128,000	36,000	69,000
Total animal products 8,364,000	5,468,000	5,349,000

Grand total farm products\$23,787,000 \$12,402,000 \$14,310,000 products\$23,787,000 \$12,402.000 \$14,310.000
In connection with the general question of values of food products, particularly animal products, a very interesting comparison has been issued by the Department in regard to the number of chickens on farm, the estimated total being 543,000,000 raised during the year, compared with an estimated total of 473,000,000 in 1919, the Census year. The total value of eggs produced was given at \$500,008,000, against \$678,654,000 in 1919.

Sterling Exchange Helps Trade.

The persistent strength of sterling exchange since the debt settlement was arranged has continued to be an extremely helpful factor in the general foreign situa-tion, but the direct effect of this advance seems to be a growing confidence on the part of the British that they should wait as long as possible before buying any-thing, as every advance in sterling makes it that much easier for them to buy. Con-tinental conditions are very chaotic and the general influence of the Ruhr opera-tions seems to be to restrict business to a minimum in most lines of export prod-ucts which has been particularly notice-able in the new business in breadstuffs, although it has not yet been perfected in provisions.

Hog slaughtering in the west for the Hog slaughtering in the west for the week ending February 24 estimated 894, 000 against 721,000 previous week and 589,000 same week, 1922. This makes a total for the winter season to date of 14,476,000, against 10,250,000 last year.

PORK.—The market was quiet but firm, with mess at New York \$27@28, family

Chicago cash pork was quoted at \$24.50. At Chicago cash pork was quoted at \$24.50. LARD.—Demand was good, domestic and export, and the market was firm. At New York prime western was New York prime western was quoted at 12.30@12.40c, middle western 12.15@ 12.30@12.40c, middle western 12.10@12.25c, city at 12c, refined to the continent 13¼c, South American 13½c, Brazil kegs 14½c, and compound 13@13½c. At Chicago regular lard in round lots was around 11½c, loose lard .75 under May, and leaf lard 10%@10½c.

lard 10%@10½c.
BEEF.—The market was quiet but was firmly held, with mess at New York \$15.50@16, packet \$17@17.50, family \$19@21, extra India mess \$32@34, No. 1 canned roast beef \$3.25, sweet pickled tongues \$55@65 nom. per bbl.

SEE PAGE 41 FOR LATER MARKETS.

HAMS PILING UP LIKE LAST YEAR. Lard Will Also Accumulate and Outlet Needed.

(Special Letter to The National Provisioner from James A. Duggan.)

Chicago, March 1, 1923.—The receipts of hogs so far this year in the twenty principal livestock markets of the country are 7,500,000, as against 6,100,000 for a corresponding period in 1922, and 7,000,000 for the same time in 1921.

There is little change in the price of hogs from last week. The average price of hogs is around \$8.00@10.00 today (March 1). It is rather surprising to find a hog market holding up on a dull trade in hog meats.

Hams are piling up rapidly and it is anticipated that the stocks will show heavy record at the end of the month. On February 1 in the 7 western markets there were 1251/4 million hams on hand as against 711/2 million the year previous.

If the increase in ham stocks is as heavy in February as it was in Januaryand there is every reason to believe it will be-the stocks of hams will be very burdensome.

Sweet pickled hams are wholesaling around 15c lb. and it is surprising that the trade is not better. Hams selling around the price of pork loins is not a very encouraging feature of the trade for hog meats.

Lard Demand Big Now.

There has been a big demand for lard and the accumulations have been going on slowly so far this year. On February 1 there were about 5,000,000 lbs. short in the surpluses as compared with last year but by the first of July last year we had over 100,000,000 lbs. in the surpluses, and with hogs much heavier now than last with hogs much heavier now than last year and with the promise of the summer year and with the promise of the summer run of hogs as heavy as the winter's run, we can soon accumulate a big stock of lard by July. Warm weather is not far off and lard piles up rapidly during the spring and summer months.

Must Depend on European Demand.

European demand is the only thing to

European demand is the only thing to be depended upon to sustain lard around present levels and European conditions are not improving by any means. On the contrary they are getting worse.

Charles M. Schwab, who is traveling in England, is credited as saying that he "never saw such misery in England before." Sooner or later this country is bound to feel the bad effects of European conditions. We must have a European outlet for our surpluses, and we do not conditions. We must have a European outlet for our surpluses, and we do not think it possible for Europe to continue buying lard as freely as it has been, and while lard may not show weakness for some time to come, lard-making hogs around \$7.85 and July lard at \$11.75 is too wide a spread, nearly \$4.00 per hundred over hogs.

Many are losing sight of the fact that we are raising two full crops of hogs a year. Last year's big summer and fall run of hogs strengthens the belief. The winter crop of hogs will probably continue up to April in good volume, and in May the fall pigs will start. Many farmers tell us they have as many fall pigs as they had spring pigs. This means a continuous

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Automatic Regulation for

and quickly installed. The de-

sired temperature is obtained and held by a simple adjustment, and requires no further attention. This saves valuable time and protects your product.

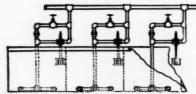
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Showing application of the No. 18 Regulator Ham Cooking Vats. Arrangement may be modified for other conditions.

liberal supply, at least up to July, when there will be a world of heavy sows coming to market.

Without a good average European trade this summer—and we have no faith in such a trade—those who are anticipating this hop works market may meet with discharge. a higher hog market may meet with disappointment. Hogs are too high now for what the product is bringing.

The only one who is getting any profit out of hog products at the present time is the retailer. If the public could get the benefit of the low price of hams and fresh pork through the retailer, the situation for the profess would be retailer. tion for the packer would be greatly improved. We still think heavy hogs will sell down to 7c lb. before the winter packing season is over.

Meat Production and Consumption Statistics

Meat and livestock production and consumption statistics for December, 1922, with comparisons for December, 1921, have been compiled by the U. S. Bureau of Agricultural Economics and are as follows:

CATTLE, CALVES, BEEF AND VEAL.

	1921.	mber —— 1922.	-January - 1921.	December— 1922.
Inspected slaughter: Cattle Calves	586,192 259,045	778,736 308,646	7,608,280 3,807,568	8,677,807 4,181,569
Average live weight: Cattle, pounds.	1,008.28 174.26	957.52 176.09	******	
Average dressed weight: Cattle, pounds	537.46	504.42		******
Calves, pounds	100,31	101.63		******
Reef, pounds. Veal, pounds.	$\begin{array}{c} 315,054,752 \\ 25,984,804 \end{array}$	392,810,013 31,367,693	$\substack{4,112,803,905\\366,665,899}$	4,610,003,149 396,390,910
Beginning of month: Fresh beef, pounds	63,188,392	73,026,778		
Fresh beef, pounds		22,601,655		
Fresh beef, pounds. Cured beef, pounds. Exports:	$\frac{68,495,278}{16,312,593}$	$\frac{91,819,706}{24,401,830}$	******	
Fresh beef and veal, pounds. Cured beef, pounds. Canned beef, pounds. Oleo oil and stearin', pounds. Tallow, pounds.	$\substack{222,467\\1,325,056\\154,646\\10,707,547}$	453,689 1,346,076 142,712 7,452,333	$\begin{array}{c} 12,289,800 \\ 24,590,582 \\ 6,077,248 \\ 160,674,137 \end{array}$	3,926,937 26,208,225 2,550,770 119,374,698
Imports:2		2,239,082	13,797,928	119,374,698 31,376,275
Fresh beef and veal, pounds	3,421,681 4,633		32.377,922 1,868,412	******
Average cost in U. S. of all classes and grades— Cattle	\$5.75	\$6.07	*****	*******
Cattle, good steers (Chicago)	\$7.51 \$8.74	\$7.79 \$10.64		******
Veal calves (Chicago)	\$14.05 \$7.81 \$18.20	\$15.59 \$9.42	******	*******
Cattle, good steers (theago) Reef careasses, good grade (eastern markets) Veal calves (Chicago) Veal careasses, good grade (eastern markets) Veal careasses, good grade (eastern markets) Receipts, cattle and calves, of public stockyards Stocker and feeder shipments from public stockyards Estimated number of cattle on farms in U. S.:	\$18.20 1.416,592 245,395	\$16.40 1.824,638 356,948	$\substack{19,786,794\\3,503,861}$	23.217,038 4,929,251
Jan. 1. Dec. 13.	65,587,000	65,632,000	******	******
HOGS, PORK, AND		DUCTS.	******	******
Inspected slaughter of hogs	3,806,798	5.201,437 220.07	38,982,356	43,103,629
Average dressed weight, pounds. Total dressed weight (carcass), pounds. Number of pounds of lard per 100 lbs. live weight	168 67	169.52 881,747,600 15.81	6,746,835,077	7,447,736,056
Storage: Reginning of month				******
Fresh pork, pounds. Cured pork, pounds.	37,512.934 $318,076,056$	33,773,531 385,724,939		******
End of month—	42,001,231	32,506,465	******	******
Fresh pork, pounds. Cured pork, pounds. Lard, pounds. Exports:	51,203,207 363,892,891 47,541,270	72,213,788 $495,098,254$ $47,705,111$	******	
Fresh pork, pounds. Cured pork, pounds. Canned pork, pounds.	$\frac{1.410,099}{38,869,505}$	5,950,695	56,083,795	26,974,406
Canned pork, bounds.	114 140	68,861,963 142,309	$\substack{680,522,556\\1,150,082}$	670,080,839 2,563,298
Lard, pounds	619.036 $66.055.582$	937,396 $81,111,670$	8,908,222 892,892,358	9,704,432 787,447,109
Sausage, pounds. Lard, pounds. Imports: Fresh pork, pounds. Prices per 100 lbs.;	107,847	40.17	816,093	
Average cost in U. S. of all classes and grades Live hogs, medium weight (Chicago) Fresh pork, loins, 10-14 lbs. (eastern markets)	\$6.94 \$7.05 \$17.23	\$8.17 \$8.27	******	
Snowders-	\$13,53	\$15.80 \$13.42	******	******
Skinned (eastern markets). Picnics, 6-8 lbs. (eastern markets). Butts, Boston style (eastern markets).	\$11.82 \$14.98	\$11.67 \$15.81	******	******
Bacon, breaktast (eastern markets)	\$24.35	\$27.46	******	******
Lard, tierces (eastern markets)	\$22,04 \$10.92	\$20.94 \$12.57		******
Hams, smoked, 10-12 lbs. (eastern markets). Lard, tierces (eastern markets). Receipts 2f hogs at public stockvards. Stocker and feeder sbipments from public stockyards	$3,930,790 \\ 35,426$	5,004,179 $45,931$	41,100,989 498,516	44,067,489 592,630
Jan. 1	56.097.009	57,834,000	******	******
Dec. 1°	******	······	******	******
SHEEP, LAMB, Inspected slaughter, sheep and lambs		\$57,611	13,004,905	10.928.941
Average live weight pounds	89.51	85.81 40.93	******	
Average dressed weight, pounds. Total dressed weight (carcass), pounds. Storage, fresh lamb and mutton: Peginning of month, pounds.	7 599 449	35,102,018 3.633,459	493,571,427	418,291,692
End of month, pounds. Exports of fresh lamb and mutton, pounds. Imports of fresh lamb and mutton, pounds.	6.444,256 146,424	4,528.460 55,241	64,104,295	1,954,752
Price per 100 pounds:	1,416,208		25,394,988	1,004,402
Average cost in U. S. of all classes and grades sheep and lambs	\$9.07	*12.64		
sheep and lambs. Lambs, 84 lbs. down, medium to prime (Chicago). Lamb carcasses, good grade (eastern markets). Sheep, medium to choice grade (Chicago). Mutton good grade construction of the chicago.	\$10.65 \$24.19	\$14.29 \$24.35		
	\$5.07 \$13.57	\$7.20 \$14.40	******	
Receipts of sheep at public stockyards Stocker and feeder shipments from public stockyards Estimated number of sheep on farms in U. S. Jan. 1	$\substack{1,664,337\\202,202\\37,452,000}$	$\substack{1.516.429\\255.772\\36,327,000}$	24.168,032 3,094,627	22,364,475 4,166,720
11929 figure is for also stearin only				

11922 figure is for oleo stearin only.

On account of new tariff law, import figures for December, 1922, are not available and export figures are domestic only. c only. i.r animals on farms in U. S. for Dec. 1 not yet available.

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TALLOW, STEARINE, GREASE AND SOAP

TALLOW-Operations in tallow continue on a very good scale, and at higher prices, the market gradually advancing under absorption by soap interests. Following the sales late last week of some 300 drums of extra at 8%c, there was active buying the middle of this week, estimated to have been between 500,000 and 1,000,000 lbs., at nine cents for extra, an advance of 1/8c from the previous sales, and an upturn of 1/4c from the middle of last week

last week.

The tallow market is looked upon as relatively cheap compared with other oils and greases, and with little or no opposition from foreign tallows, the feeling was quite friendly. On any further advance, however, it is felt that business in South American tallow will be more than a possibility. However, much comfort was taken from the reports that soap interests were being forced to look about for substitutes for their supplies, and have absorbed approximately 100,000 bbls. of crude whale oil since the first of the year, the bulk of it coming from Norway.

At Liverpool the market was firm, with

crude whale oil since the first of the year, the bulk of it coming from Norway.

At Liverpool the market was firm, with Australian choice quoted at 42s 3d and Australian good mixed at 40s. At the London auction 1,443 casks offered and 953 casks were sold, with prices unchanged. New York prime city was quoted at 8½% comminal, special loose, 8½% comminal, extra nine cent sales, and edible at 9½% 95%c. At Chicago packers' No. 1 was quoted at 8½% 283% c, packers' prime 8½% 95c, and edible at 9%9½c.

OLEO OIL.—The market was inactive and nominal with extra at New York 13½c; medium, 10¾c; lower grades, 10c; extra at Chicago, 12½% 12%c.

STEARINE—The market was quiet and steady with operations light and the undertone firmer. Sales of small lots were reported at 10½c, but buyers were not following the upturns, and car-lots at New York was quoted at 10¼% 10½c for cleo, and at Chicago, 9½% 10c. Lard stearine at New York was quoted at 13¼% 13½c, and at Chicago 13% 13¼c.

SEE PAGE 41 FOR LATER MARKETS.

LARD OIL—Demand remained rather quiet, but the market continued firm owing to the action of lard and the strength elsewhere. At New York edible was quoted at \$1.10@1.15, extra winter \$1.02@1.05, extra at 98c@\$1, extra No. 1 at 94@96c, No. 1 at 92@94c, and No. 2 at 90@92c.

90092c.

NEATSFOOT OIL—A fair trade in cold pressed was put through recently, and the market remained strong. Pure at New York was quoted at \$1.02@1.04, extra at 97@98c, No. 1 at 92@94c, while cold pressed was quoted all the way from \$1.28@1.35

\$1.23@1.35. GREASES—A very firm market was again witnessed in greases with limited offerings everywhere, and a fairly good demand in evidence. At New York yellow and choice house were quoted at 81/4 @ 101/2c, carbage \$1/26, choice white at 101/4 @ 101/2c, garbage \$1/26 against white at \$1/26 agains white grease 7%c sales, tank-car basis, while horse grease was reported to have sold at 9½c per lb. At Chicago brown was quoted at 8½ @8½c, yellow 8½ @8%c, house 84@81/2c, and choice white at 91/2@93/4c.

NEW YORK LARD EXPORTS.

Exports of lard from New York from February 1 to February 27, 1923, according to unofficial reports, were 68,319,504 lbs.; tallow, 280,400 lbs.; greases, 2,915,000 lbs.; and stearine, 202,600 lbs.

JANUARY OLEOMARGARINE OUTPUT.

Official government reports just compiled of the output of oleomargarine for the month of January, 1923, as shown by revenue stamp sales, indicate that the production for that month was 673,654 pounds colored and 19,959,300 pounds uncolored, a total of 20,632,934 pounds. This is 667,168 pounds more than the production for the preceding month and 3,745,538 pounds more than the same month a year ago. Official figures of oleomargarine production in the United States for the last 13 months are as follows:

																	Pounds.
January,	1	9	2	2					٠		٠						.16,887,396
February							٠	٠									.12,194,000
March																	.15,262,577
																	.13,685,849
																	.12,764,945
																	.10,040,200
July	٠									۰							.14,973,830
August .							۰										.11,754,200
Septembe	er											٠				۰	.16,113,234
																	.16,180,332
Novembe	r																.19,805,966
December	r							0		٠	0			0			.19,964,866
																	. 20,632,934

CHEMICALS AND SOAP SUPPLIES.

(Special Letter to The National Provisioner.) New York, February 27, 1923.—Latest quotations on chemicals and soapmakers' supplies are as follows:

supplies are as follows:

Seventy-six per cent caustic soda, \$3.70
@3.80 per 100 lbs.; 98% powdered caustic
soda, 4½@4%c lb.; 58% carbonate of soda,
\$2.00@2.35 per 100 lbs.
Clarified palm olive oil in casks of 2,000
lbs., 8½@8%c lb.; commercial yellow
olive oil, \$1.20 gal.; olive oil foots, 9½@
9%c lb.; East India Cochin cocoanut oil,
13c lb., duty paid; Cochin grade cocoanut
oil, domestic, 11c lb.; Ceylon grade cocoanut
oil, 10c lb.
Prime summer yellow cottonseed oil

nut oil, 10c lb.

Prime summer yellow cottonseed oil, 12%@13c lb.; soya bean oil, 12@12½c lb.; domestic linseed oil, 98c@\$1.02 gal.; corn oil, nominal, 12¼@12½c lb.; peanut oil, in bbls., New York, deodorized, 17½@18c lb.; peanut oil, in tanks, f. o. b. mills, 13½c lb.

Prime city tallow, extra, 8%c lb.; dynamite glycerine, nominal, 17½@17%c lb.; saponified glycerine, nominal, 13½@13½c lb.; crude soap glycerine, nominal, 11¾@12c lb.; crude soap glycerine, nominal, 11¾@12c lb.; chemically pure glycerine, nominal, 18½@19c lb.; prime packer's grease, nominal, 8¼@8¾c lb.

Packinghouse By-Products Markets

Chicago, March 1, 1923.
Blood this week, compared with the high point for the season, slipped about 25c per unit ammonia, although sellers are holding at upward of \$5.00 in some cases.

Prices are about 50@75c unit ammonia lower than the season's high point for shipment after March 15. Current market is around \$4.75 for best, \$4.60 for choice, and \$4.25@4.40 for medium to good.

				t ammonia
Ground, 1114	to 12%	ammonia.	 	\$ 4.75@4.8
Unground, 1	0 to 11%	ammonia.	 	 4.50@4.6
Unground, 7	to 9% 1	mmonia	 	 4.25@4.3

Fertilizer Tankage Materials.

This market is very quiet, prices tending downward.

Unit amn	
High grade, ground, 10-11% ammonia\$4.35@	4.50
Lower grade, ground, 6-9% ammonia 4.60@	4.25
High grade, unground 4.20@	4.25
Medium grade, unground 3.65@	3.85
Low grade and country rend., unground 3.35@	3.50
Hoof meal 3.65@	3.75
Liquid stick 3.50@	3.60
Grinding hoofs, pigs' toes, dry40.00@	42.50

Bone Meals.

The market is pretty well cleared up accept some accumulations which are except being held because some persons expect a better market for the fall.

														Per ton.
Raw bone	meal													.\$38.00@42.00
Steamed.	ground	ĵ.	î	Ĵ	î	ì	ì	ì						. 23.00@25.00

Cracklings.

Cracklings have been steady to strong is week. The market in the East has this week. The been a little firm.

Per ton, Pork, according to grease and quality...\$65.00@85.00 Beef, according to grease and quality... 50.00@60.00

Glue and Gelatin Stock.

Regarding cattle jaw, skull and knuckle bones, opinion is gaining ground that prices are due for a slump.

										Per to	n.
Calf stock									. !	\$35.00@	40.00
Edible pig skin strips											
Rejected manufacturing	t	IO	es	4.			٠			50.00@	52.50
Horn piths										38.00@	40.00
Cattle laws, skulls and	kı	nu	ck	le	8				٠	36.00@	38.00
Junk and hotel kitchen	be	one	89				۰			26.00@	30.00
Hog, calf and sheep bon	es.									28.00@	32.00
Sinews, pizzels and hide	9	tri	m	m	ir	ıg	8		٠	18.00@	22.00

Mfg. Bones, Horns and Hoofs.

These have been pretty strong. The market has been steady for strictly export trade, and all round has been so good that some of the bigger packers' supplies are contracted for up to August.

													Per te	on.
No.	1												\$235.00@	255.00
No.	2	horns											175,00@	225.00
No.	3												100.000	
Cull	9													
Hoo	fs.	black	and	str	ipe	d.	u	0115	80	rt	ed			
Hoo	fs.	white	, un	ISSO	ite	d.							50.00@	
Rou	nd	shin	bones	. 111	aass	SOF	ter	1.	he	a	rie	8.	70.00@	
Rou	nd	shin I	ones.	un	ass	ort	ed		lig	ht	14.		60,000	
Flat	8	hin bo	nes,	nna	1088	rte	d.	he	18	ie	8.		€0.00@	
Flat	8	hin bo	nes,	una	SSO	rte	d	lig	ht	S.			50.00@	
This	ch	bones	una	8301	ted		he	avi	68				60,000	65.00
		bones												

Hog Hair.

Demand for hog hair has continued steady. Coil dried winter processed has sold at 3@3½c f. o. b. production points and 7c for winter processed.

Pig Skin Strips.

The market has been about steady with a fair amount of trading. No. 1 tanner stock sold at 6c per lb., with No. 2's and 3's going for gelatin purposes, if government inspected and frozen, at around 4½c lb. basis Chicago.

EASTERN FERTILIZER MARKETS.

(Special Report to The National Provisioner.) New York, February 28, 1923.

As far as tankage, blood, etc., are concerned, business has been about at a standstill in the New York market this week. The stocks of these materials are small. Therefore, there has been no recession in prices as quoted by the pro-

As soon as the weather conditions improve it is expected that there will be quite some demand for tankage for prompt shipment. Beef cracklings, meat scraps, etc., are still being offered freely at low prices with a very small demand.

Sulphate of ammonia is quite well sold out for the next two months and nitrate of

soda is holding firm in price.

COTTON OIL SITUATION ANALYZED.

An analysis of the cottonseed oil situaof the months of August, September, October, November and December, 1922, and January, 1923, with comparisons for the previous season of 1921-22, based on the federal census reports, taking in the seed, the crude oil and the refined oil statistics, has been prepared by Aspegren & Co., and makes a very interesting study. It is as follows:

MOVEMENT	or	COTTONSEED	AT	CRUDE	OII

Tons 1 1922-23. 13.168	received—— 1921-22.
	1921-22.
13.168	
	99.821
90,931	120,291
680,841	574.970
	949,641
	609,072
	270,190
213,235	133,373
3,031,123	2,757,358
-Tons c	rushed
1922-23.	1921-22.
48.816	99,308
	304,298
	607,960
	574,405
	415,553
469,783	339,132
2,498,679	2,340,656
Increase	or decrease
	on hand
	1921-22.
	99,821
	+ 21.496
947,040	
	+270,169
	+341,681
	+34,667
	-147,201
256,547	-205,995
n hand en	d of month
1922-23	1921-22.
	120.801
	390,970
	732,651
	767,318
	620,117
	414,122
	Tons.
1922-23.	1921-22.
3.587.000	2,918,102
	99,821
20,100	
3,600,168	3.017.923
	2,340,656
	2,580
	414,122
	260,565
s. crude	oil, which
	959,340 696,748 376,890 213,235 —Tons c 1922-23, 48,816 332,281 590,235 609,679 447,885 469,783 .13,168 422-23, 13,168 437,949 367,974 86,537 73,348

on is equivalent to 105,031,100 ibs. crude oil, which to per cent refining loss equals 144,100,047 lbs. rened oil, or 360,250 barrels.

569,045 tons seed still to be received at 300 lbs. rude oil per ton is equivalent to 170,713,500 lbs. rude oil, which at 9 per cent refining loss equals

crude oil, which at 155,349,285 lbs. refine			
†Based on last gove 9,964,000 bales.	ernment co	otton crop	estimate of
MOVEMENT OF CRU	DE OIL A	T CRUDE	OIL MILLS
MOTERALITY OF CHO	220 0113 11		produced-
		1922-23.	1921-22.
On hand beginning of	e concon	3,475,712	8,908,066
On hand beginning o			
August		13,354,344	29,560,855
September		98,608,225	92,221,913
October		78,406,273	184,674,717
November		83,521,698	173,889,308
December		40,469,481	131,336,389
January	1	45,291,726	103,646,030
Total	7	63,127,459	724,237,278 oments
		1922-23.	1921-22.
August			28,766,076
August		11,100,435	
September	*******	67,171,043	66,514,846
October		45,645,307	160,601,910
November		65,690,055	158,515,158
December	1	52,443,878	132,223,154 105,739,828
January	1	54,268,652	105,739,828
Total	6		652,360,972 or decrease
			on hand—
		1922-23.	1921-22.
On hand beginning o		3,475,712	8,908,066
August			+ 794,779
September			+25,707,067
October	+	32,760,966	+24.072,807
November	+	17,831,643	+15,374,150
December		11,974,397	- 886,765
January		8.976,926	-2.093.798
		On hand e	nd of month
		1922-23.	1921-22.
August		5,729,621	9,702,845
September		37,166,803	35,409,912
October		69,927,769	59,482,719
			74,856,869
November		87,759,412	
December		75,785,015	73,970,104
January		66,808,089	71,876,306
DISTRIBUTION		OIL HOL	
	Aug. 1, 1922.	Sept. 30 1922.), Oct. 31, 1922.
	Pounds.	Pounds	
44			s. Founds.
At mills	3,475,712	37,166,8	
At refineries	1,041,907	2,372,5	52 5,045,141
In transit to refin- eries and consumers	2,387,790	15,366,3	30 21,898,780
Total	6,905,409		85 96,871,690
	Nov. 30,	Dec. 31	, Jan. 31,
	1922.	1922.	1923.
	Pounds.	Pounds	. Pounds.
At mills	87,759,412	75,785,0	
At refineries	8,218,849	9,457.70	
In transit to refin-	-1-10,010	01.00111	o olomaiaso
eries and consumers	19,269,170	21,744,8	15 17,299,060
Total	115,247,431	106,987,5	36 92,128,624

92,128,624 lbs. crude oil at 9 per cent refining loss equals 83,837,048 lbs. refined oil, or 209,593 barrels. CONSUMPTION OF CRUDE OIL AS CRUDE OIL.

August. Pounds.	September. Pounds.	October. Pounds.
1,041,907	1,041,907	1,041,907
2,387,790	2,387,790	2,387,790
11,100,435	78,271,478	223,916,785
14,530,132 10,206,070	81,701,175 55,114,232	227,346,482 189,419,389
4,324,062	26,586,943	37,927,093
4,317,301	17,738,882	26,943,921
6,761	8,848,061	10,983,172
90,231	197,451	1,585,355
November.	December.	January.
2,387,790	2,387,790	2,387,790
389,606,840	542,050,718	696,319,370
393,036,537 344,738,287	545,480,415 482,034,641	699,749,067 637,212,449
	63,445,774	62,536,618
27,488,019	31,202,521	25,320,535
20.810.231	32.243.253	37.216.083
	Pounds. 1,041,907 2,387,790 11,100,435 14,530,132 10,206,070 4,324,062 4,317,301 6,761 90,231 None November. Pounds. 1,041,907 2,387,790 389,606,840 393,036,537 344,738,287 48,298,250 27,488,019 20,810,231 5,270,079	1,041,907 1,041,907 2,387,790 2,387,790 11,100,435 78,271,478 14,530,132 81,701,175 10,206,070 55,114,232 4,324,062 26,586,943 4,317,301 17,738,882 6,761 8,848,061 90,231 197,451 None None Pounds. 1,041,907 1,041,907 2,387,790 2,387,790 389,606,840 542,050,718 393,036,537 545,480,415 344,738,287 482,034,641 48,298,250 63,445,774 27,488,019 31,202,521 20,810,231 32,243,253 5,270,079 10,931,512

CRUSH PER TON.

CRUSH PER TON.

During August 48.816 tons seed produced 13,354,344
lbs. crude oil, equivalent to 273.5 lbs. per ton, or
13. per cent, compared to 4.9 per cent last year, or
13. per cent, compared to 14.9 per cent last year,
608.225 lbs. crude oil. equivalent to 296.8 lbs. per
ton, 14.8 per cent, compared to 15.2 per cent last
year.

During October 590,235 tons seed produced 178,
406,273 lbs. crude oil, equivalent to 302.3 lbs. per ton,
or 15.1 per cent, compared to 15.2 per cent last year.

During November 609,679 tons seed produced 183,
521,698 lbs. crude oil, equivalent to 301.1 lbs. per
ton, or 15.1 per cent, compared to 15.1 per cent last
year.

year.

During December 447,885 tons seed produced 140,-469,481 lbs. crude oil, equivalent to 313.6 lbs. per ton, or 15.7 per cent, compared to 15.8 per cent last year.

During January 469,783 tons seed produced 145,-291,726 lbs. crude oil, equivalent to 309.3 lbs. per ton, or 15.5 per cent, compared to 15.3 per cent last year.

Total—2,498,679 tons seed produced 759,651,747 lbs. crude oil, equivalent to 304.0 lbs. per ton, or 15.2 per cent, compared to 15.3 per cent last year.

REFINED OIL.

REFINED	Utt.
	-Pounds produced-
	1922-23. 1921-22.
On hand beginning of season	
August	
September	
October	
November	
December	
January	111,002,100 50,001,100
Total	755,456,383 783,305,942
	Delivered consumers
	1922-23. 1921-22.
August	67,256,966 103,557,935
September	93,308,783 113,382,508
October	
November	109,376,002 69,422,883
December	
January	
Total	558,558,071 508,213,792
	Increase or decrease
	-stock on hand-
	1922-23. 1921-22.
On hand beginning of season	
August	
September	-52,804,435 -68,467,253
October	
November	
December	
January	+51,227,316 +16,740,989
	On hand end of month
	1922-23. 1921-22.
August	105,779,172 155,807,806
September	52,974,737 87,340,553
October	57,827,085 117,376,642
November	94.102.441 189.482.579
December	
January	145,670,996 258,351,161 196,898,312 275,092,150

DISTRIBUTION REFINED OIL HOLDINGS

DESTRUCTION .	TOTAL TOTAL	OIL HOL	DIMUE.
At refineries	Aug. 1, 1922. Pounds. 154,039,622 4,540,745	Sept. 30, 1922. Pounds. 42,454,913 4,341,570	Oct. 31, 1922, Pounds, 45,800,741 4,441,482
In transit from re- fineries	5,270,993	6,178,254	7,584,862
Total	163,851,360 Nov. 30, 1922.	52,974,787 Dec. 31, 1922.	57,827.085 Jan. 31, 1923.
At refineries At other places In transit from re-	Pounds. 75,901,980 7,675,347	Pounds. 126,577,832 7,633,031	Pounds, 184,060,480 6,056,106
fineries	10,525,114	11,460,133	6,781,726
Total		145,670,996 ING LOSS.	196,898,312

AVERAGE REFINING LOSS.

During August 10,206,070 lbs. crude oil yielded 9,184,778 lbs. refined oil—10,00 per cent loss, compared to 10,34 per cent loss last year.

During September 44,908,162 lbs. crude oil yielded 40,504,348 lbs. refined oil—9.81 per cent loss, compared to 9.14 per cent loss last year.

During October 134,305,157 lbs. crude oil yielded 124,329,014 lbs. refined oil—7.43 per cent loss, compared to 7.63 per cent loss last year.

During November 155,318,989 lbs. crude oil yielded 145,651,358 lbs. refined oil—6.22 per cent loss, compared to 6.08 per cent loss last year.

During December 137,299,354 lbs. crude oil yielded 127,550,398 lbs. refined oil—6.29 per cent loss, compared to 8.34 per cent loss last year.

During January 155,117,808 lbs. crude oil yielded 144,382,486 lbs. refined oil—6.96 per cent loss, compared to 5.75 per cent loss last year.

Total—637,212,449 lbs. crude oil yielded 51,676,082 lbs. refined oil—7.96 per cent loss, compared to 5.75 per cent loss last year.

Total—637,212,449 lbs. crude oil yielded 51,676,082 lbs. refined oil—7.96 per cent loss, sompared to 8.81 year.

SHIPMENTS OF REFINED OIL.

SHIPMENTS OF REFINED OIL

SHIP MEALS OF	REFINED VIL.
	Export pounds
	1922-23. *1921-22.
August	1,679,265 4,688,123
September	
October	
November	
December	
January	
Total	Not available 32,495,855
	-Domestic pounds-
	1922-23. 1921-22.
August	65,577,701 98,869,812
September	89,777,426 107,029,193
October	116,223,740 85,009,932
November	100,209,741 66,388,999
December	70,219,599 46,522,464
January ,	. Not available 71,897,537
Total	
1	Total pounds
	1922-23. 1921-22.
August	
September	
October	
November	
December	
January	93,155,170 76,813,169
Total	558,558,071 508,213,792

*In regards to exports, the government did not start separating crude oil exports from refined oil exports until January 1, 1922. In view of the fact that the duty on refined oil to Canada is practically prohibitory we can safely assume that all shapments or Canada are considered to Canada and the compiling out of the constant of th

REFINED OIL-Summary	in	Bar	rels		
			400		oduced-
				2-23.	1921-22.
Old crop stock				,628	570,659
August			22	2,962	77,755
September			101	,261	112,288
October				,823	308,742
November			364	,128	353,822
December				8.883	301,113
January				,956	233,886
Total			1.888	.641	1,958,265
				- Cor	sumed
			1925	2-23.	1921-22.
August				142	258,895
September				,272	283,456
October			205	692	233,652
November				3,440	173,557
December				,961	128,941
				.888	192,033
January			402	,000	192,000
Total		!	1,396	3,395	1,270,534
					hand-
				2-23.	1921-22.
August				,448	389,519
September			132	2,437	218,351
October			144	,568	293,441
November			235	,256	473,706
December				.178	645,878
January			492	,246	687,731
oundary			192	2-23.	1921-22.
Refined oil on hand				.246	687,731
Seed on hand will produce			260	,250	295,269
Crude oil on hand will p	modi	1100		.593	224,405
Seed still to be receive	1001	will	200	2000	22,200
produce			388	,373	185,783
Total			1.450	.462	1.393.188
Less approximate minimum	ca	rry-	.,	,	210001-11
over for end season A					
1923	***		434	,325	†434,325
Available for coming six n	non	ths.	1,016	,137	958,863
			192	2-23.	1921-22.
Monthly average consumpt				-	
first six months			†232	,732	†211,756
Monthly average consumpt					
last six months			\$168	,356	†164,746
Monthly average consumpt					
all twelve months			1201	.044	+188,251

VEGETABLE OILS

WEEKLY REVIEW

THE NATIONAL PROVISIONER is Official Organ of the Interstate Cottonseed Crushers' Association, the Texas Cottonseed Crushers' Association, South Carolina Cottonseed Crushers' Association, the Georgia Cottonseed Crushers' Association and the Mississippi Cottonseed Crushers' Association.

Undertone Strong-Trade Futures Fair-Cash Trade Better-Crude Light-March Liquidation Over-Estimated Only 400,-000 Tons Seed-Big Market After February 1.

The cotton oil futures market on the New York Produce Exchange, while more irregular than of late, with a fair daily turnover, maintained the very strong underione that has been noted the past four or five weeks, and notwithstanding active liquidation in the March position following deliveries of about 7,300 bbls. on contract, and relative weakness in the March position, the current delivery going at one time to 45 points under May and 60 points under July, maintained a level close to the best prices of the season, under the influence of a better cash demand for oil, with the extreme steadiness in lard and new season's highs in cotton. It was very noticeable that at all times speculative pressure was materially limited, and the bulk of the commission house selling was largely profit taking, while good support developed on all setbacks.

Bears Were at a Disadvantage.

With crude oil continuing in a tight

position, and a lack of pressure of cash oil from any quarter, tallow advancing and other greases strong, the bears were at a material disadvantage, but at the same time there was no aggressive buying power, and on the bulges there was a lack of any important fresh buying. With refiners doing little, the commission house operations resulted in a puzzling market. Nevertheless there was an outspoken friendly feeling to prices in most of the leading local quarters, and those working against values were giving little opposition, and largely spreading between the various months, or between lard and oil.

various months, or between lard and oil. Accurate information on the cash demand is very scarce in this commodity, and is a feature that must be contended with on all reports relative to the cash situation. However, in several leading quarters it was confirmable that demand for oil had improved somewhat, but the cooking oil trade was small. On the other hand demand for compound in the eastern territory, and in the west, was very limited, meeting the competition of the relatively cheap lard, but in the southern territory compound demand remained good, and the better financial position of the south was apparently being reflected somewhat in the consumption of the south's own product, cotton oil, where it is no unusual feature to find compound selling at or above lard prices. selling at or above lard prices.

Expect Small Seed Marketing.

Expect Small Seed Marketing.

A new feature injected into the situation the past few days has been the claims coming from leading refiners and from the south, that the marketing of seed from February 1 for the balance of the season would be extremely small, and amount to only about 400,000 tons, whereas some had expected that up to 600,000 tons, and possibly a little more than that figure, would go to the mills. It was contended that the price of crude oil did not permit paying the prevailing seed quotations. and

would go to the mills. It was contended that the price of crude oil did not permit paying the prevailing seed quotations, and that extra seed was being held on the farms with which to increase the cotton acreage for the new crop.

Foreign interests have been in the market for lard in a liberal way for a week or more, and at a time when the domestic trade for lard was very good, resulting in relative firmness in cash lard quotations, but the lard levels continued relatively low compared with compound, with prime western lard at New York quoted at 12.30 @12.40c, middle western 12.15@12.25c, and New York city lard around 12c, compared with compound at 13@13½c, in car lots. Tallow advanced to nine cents sales for extra at New York, between 500,000 and 1,000,000 lbs. being absorbed by soap interests at that figure, while all other greases were firmly held and oleo stearine was quoted at 10¼@10½c.

Winter Oil Holds Premium.

Winter Oil Holds Premium. Winter cotton oil was held at 13c with

ASPEGREN & CO., INC.



Produce Exchange Building NEW YORK CITY DISTRIBUTORS



AGENTS PRINCIPAL EASTERN CITIES





SELLING AGENTS FOR

The Portsmouth Cotton Oil Refining Corp., Portsmouth, Va. The Gulf & Valley Cotton Oil Co., Ltd., New Orleans, La. The International Vegetable Oil Co., Savannah, Ga.

et. 31, 1922, unds, 800,741 441,482

923.

584,862 827,085 n. 31, 1923.

781,726 898,312 yielded , com-

yielded , comyielded s, comyielded s, com-

yielded s, com-

605,028 to 7.59 ds-221-22, ,688,123, ,353,315, ,450,879, ,033,884, ,054,022, ,915,682

,495,855 inds— 21-22. ,869,812 ,029,193 ,009,932 ,388,990 ,522,464 ,897,537

,717,937 ds— ,221-22. ,557,935 ,382,508 ,460,811 ,422,883 ,576,486 ,813,169 ,213,792

did not ned oil the fact octically ipments ompiling to Jan. of the balance ined oil on, the and our

.958,265 1921-22. 258,895 283,456 233,652 173,557 128,941 192,033

,270,534 1921-22. 389,519 218,351 293,441 473,706 645,878 687,731 1921-22. 687,781 295,269 224,405

.393,188 †434,325 958,863 1921-22.

185,783

+211.756 **†164,746** 1188,251

Decolorizing and Deodorizing Problems ARE READILY SOLVED SUPER FILTCHAR

This "bleaching" carbon is so powerful that only very small, or even fractional percentages are necessary to give efficient results. We welcome any opportunity to demonstrate to you its many advantages and our Technical Department is at your service to advise or co-operate. WRITE FOR FULL PARTICULARS.

INDUSTRIAL CHEMICAL CO., Sole Manufacturers FIFTH AVENUE BUILDING, NEW YORK CITY

reports of occasional sales at 12%c, maintaining its premium over the future mar-ket, while bleachable oil was offered rather freely at around 11%c f. o. b. New York, buyers' tanks.

As had been expected, oil in store at New York held by a western compound factor, that was taken in on January con-tracts was delivered on the first March de-livery day, and resulted in heavy liquidation in March, and in switching, but the local element bought the March freely, and local element bought the March freely, and sold the distant positions on the belief that the differences would narrow materially after the oil was taken care of, and the March position, after selling 45 under May, narrowed during the middle of the week to about 25 points under. It was said that a short interest still existed in the March delivery, which may eventually put March to the same price as May. Quite a little switching has been going on from May to the later positions, and one remarkable phase of the situation in gen-eral is the fact that some of the leading bulls are anticipating that May will go to

35 or 40 points, or more, discount under July

July.

Crude oil remained a ten-cent market in the southeast and valley, with fair sized sales at that figure reported, but in Texas trade was rather slow, and 9% cappeared the basis for immediate shipment. It was said that southern Texas was offering end-season run crude and that in several states crude oil had been mostly well cleaned up. pretty well cleaned up.

COTTONSEED OIL.-Market transactions:

Thursday, February 22, 1923. Holiday—No market.

Friday, February 23, 1923.

		-Ran	gen	-Clo	si	ng-
	Sales.	Ran High.	Low.	Bid.	A	sked
Spot				1100	a	
Feb				1100	a	
Mch	3900	1115	1105	1104	a	1106
Apr				1120	a	1125
May	3500	1147	1138	1138	a	1139
June				1140	a	1149
July	3800	1164	1152	1155	a	1158
Aug	100	1153	1153	1152	a	1155
Sept	400	1150	1145	1145	a	1147
Total sales	, incl	luding	swi	tches	,	5,900
Prime Crude S	S. E.	1000	sales.			

Saturday, February 24, 1923.

						•	-Ran	ge-	-Clo	si	ng_
						Sales.	High.	Low.	Bid.	A	sked.
Spot									1090	a	
Feb									1090	a	
Mch.						1500	1105	1099	1099	a	1101
Apr						100	1122	1122	1115	a	1123
May .				. ,		2600	1137	1133	1133	a	1135
June									1135	a	1144
July .						1600	1155	1152	1151	a	1153
Aug						100	1150	1150	1149	a	1156
Sept.						200	1144	1144	1143	a	1144
Tota	al	8	38	l	28	. inclu	ding	swit	ches.		7.300
						S. E.					

THE EDWARD FLASH CO. 29 BROADWAY, N. Y. CITY

BROKERS EXCLUSIVELY VEGETABLE OILS

In Barrels or Tanks

Hardened Edible Cocoanut Oil COTTON OIL FUTURES

On the New York Produce Exchange

REFINED COCONUT OIL

Coconut Butters

Highest Quality ALL MELTING POINTS

"KONUT" "Koroko" "KOKOREKA"

INDIA REFINING CO. Pioneer American Refiners

Philadelphia, U. S. A.

The Procter & Gamble Co.

COTTONSEED OIL

es, Prime Winter Yellow Venus, Prime Summer White Jersey Butter Oil Aurora, Prime Summer Yellow

Refineries

| Vorydale, O. Port Ivory, N. Y. Kansas City, Kan. Macon, Ga. Dallas, Texas

Puritan, Winter Pressed Salad Oil White Clover Cooking Oil Marigold Cooking Oil Sterling, Prime Summer Yellow

> General Office CINCINNATI, OHIO Cable Address: "Procter"

		ľ	И	0	r	10	la	y, Fel	bruary	26.	1923.			
								Sales.	Ran	ge	-Clo	si	ng-	
								Sales.	High.	Low.	Bid.	A	sked.	
Spot											1087	a	1090	
Mch.								7900	1092	1080	1087	a	1089	
Apr.											1115	a	1117	
May								3800	1130	1122	1129	a	1130	
June											1135	a	1145	
July									1150	1143	1148	a	1150	
Aug.									1140					0
Sept.									1137	1137	1140	a	1143	

Total sales, including switches, 24,500 Prime Crude S. E. 1000 asked. Tuesday, February 27, 1923.

		Ran	20-	-Clo	sing
	Sales.	High.	Low.	Bid.	Asked.
Spot				1075	a 1100
Mch	300	1005	1105	1090	a 1099
Apr				1115	a 1120
May	4700	1149	1132	1134	a 1136
June				1140	a 1146
July	5700	1169	1150	1154	a 1157
Aug				1151	a 1154
Sept		1150	1150	1145	a 1149
Oct				1050	a 1085
Total sales					

Prime Crude S. E. 1000 sales.

	¥	٧	e	L			aay, r					
								-Ran	ge	-Clo	sin	ng-
							Sales.	High.	Low.	Bid.	A	sked.
Spot										1100	a	
							100	1115	1115	1107	a	1120
Apr.										1120		
May							5100	1149	1140	1139	a	1141
June							200	1165	1165	1150	a	1154
July							2400	1166	1159	1159	a	1160
Aug.							900	1165	1159	1158	a	1160
Sept.							1100	1156	1150	1150	a	1153
Oct.										1050	a	1090

SEE PAGE 41 FOR LATER MARKETS

COCOANUT OIL. - The market was quiet and a little irregular, with some liqui-dation in evidence, but a moderate west-ern demand was in evidence, and the undertone was steady. Offerings from the coast showed a slight increase, but the Copra situation remained quiet and strong Copra situation remained quiet and strong with the market about 5.65 \(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^1\)\(^

SOYA BEAN OIL.—A moderate trade was reported, and the undertone was firm owing to Oriental strength, the latter reowing to Oriental strength, the latter resulting in a better inquiry in the domestic market. At New York crude in barrels was quoted at 12c; blown at 12¾@13c; New York, tanks, 10¾c; Pacific coast, tanks, 10¼c; Oriental oil, c. i. f. New York, bulk, was quoted at 7¾c.

PEANUT OIL.—Sales of domestic crude oil were reported at 13½c f. o. b. southeast mills, but offerings remain rather light and strongly held, and the market main-

and strongly held, and the market maintains a firm undertone. Oriental oil was quoted at 9½c nominal, and Marseilles refined for shipment, 11½c c. i. f. New York, in bond. At New York crude in barrels

COTTONSEED OILS Union Pure Salad Oil Union Choice Butter Oil

Supreme White Butter Oil I. X. L. Cooking Oil A.C.O.Co.Choice Summer White Sun Prime Summer Yellow

OTHER OILS

Peanut

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REFINERS

MILL PRODUCTS

Cotton Linters Cottonseed Cake Cottonseed Meal

Fulling and Scouring

MANUFACTURERS

SOAPS

Toilet and Laundry Gold Dust Washing Powder EXPORTERS WILCOX LARD

> Fairbank's SHORTENINGS

Boar's Head Cottolene Snowhite Fairco

THE AMERICAN COTTON OIL COMPANY

65 Broadway, New York

Cable Address "AMCOTOIL"

was nominal; tanks, f. o. b. mill, $13\frac{1}{2}$ @ 14c; refined, barrels, $16\frac{1}{2}$ @ 17c.

14c; refined, barrels, 16½@17c.

CORN OIL.—The market was quiet but firm with a fair demand in evidence and crude in barrels, New York, quoted at 12c; refined, barrels, 12¾@13¼c; cased, \$12.13, and tanks, Chicago, 10½@10%c.

PALM OIL.—The foreign market remained very firm and while liberal arrivals here are reported the oil is being applied.

mained very firm and while liberal arrivals here are reported, the oil is being applied on previous sales, so that there is little or no pressure in evidenc. African Niger oil, March-May shipment, was quoted at 7% c. i. f. New York, while Lagos spot, New York, was 8½c; shipment, 8½c; Niger, spot, New York, 7%c; shipment, 7% c.

7%c. PALM KERNEL OIL.—The market was strong and showed an advancing tendency with demand reported as improving and

imported quoted at 8% c. COTTONSEED OIL.—Demand showed some improvement and the market was strong, with crude oil, P. S. Y., spot, barrels, New York, 12@12¼c; bleachable, tanks, f. o. b. mills, 10¼@10%c; southeast and Valley, crude, 10c; Texas, 9%c.

SOUTHERN MARKETS.

Memphis.

(Special Wire to The National Provisioner.)
Memphis, Tenm., March 1, 1923.—Considerable crude cottonseed oil sold in Valley this week at 10c. Forty-one per cent protein meal is quoted at \$44.00 to \$44.50, Memphis. Loose hulls are quoted at \$14.00. Memphis markets are dull but firm

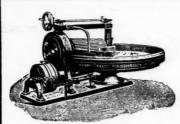
NEW YORK COTTON OIL EXPORTS.

Exports of cottonseed oil from New York from February 1 to February 27, 1923, according to unofficial reports, were 1,350 bbls.

Ho! for Hot Springs!

The 27th annual convention of the Interstate Cotton Seed Crushers' Association will be held at Hot Springs, Va., on May 2, 3 and 4. The Rules Committee will meet there on April 30 and May 1. The famous Eastman Hotel will be the convention headquarters.

This is the first time the Association ever has met at this famous resort. Are you preparing to go, and combine business with pleasure? If so, notify Secretary Robert Gibson, 201 North Texas Bldg., Dallas, Tex., and you will get further interesting informa-



GRASSO'S

"Original Holland" Margarine Machinery

Sold in America only by the

A. H. BARBER CREAMERY SUPPLY CO.

Grasso's Famous Table Worker 316 W. Austin Ave. CHICAGO, ILL.

FILTER-CEL—A Celite Product

for Fat and Oil Filtration

Improves clarity, secures better keeping qualities and reduces operating costs. Write for complete information given in Bulletin KK-40.

Celite Products Company

New York, 11 Broadway Chicage, 53 W. Jackson blvd. San Francisco, Monadosch Bidg. Calite Products Ltd., Montreal, Quas., Canada.

COLOR OF OLEOMARGARINE.

By a verdict obtained in a federal court at Chicago this week the government's internal revenue department succeeded in overturning its own signed agreement and imposing heavy penalties on an oleomargarine manufacturer for alleged violation of the color regulations under the revenue law. Facts appear to have cut small figure against the historic prejudice against oleomargarine.

The case was in the United States district court at Chicago and the verdict was for \$293,600, against the G. H. Hammond Company of Chicago. It was charged by the government that the Hammond Company manufactured and sold oleomargarine between May, 1910, and July 1, 1911, on which they paid a tax of 4c per pound and that they should have paid a tax of 10c per pound. The government further charged that the oleomargarine was artificially colored by the use of cottonseed oil which had been artificially treated to give it a reddish or brownish color.

The G. H. Hammond Company denied that the oil artificially colored the oleomargarine in violation of the terms of the statute. and further contended that a large portion of the oil was shown by the samples taken by the government itself not to be artificially colored.

The Hammond Company showed that before it began to use the oil, which was manufactured by the Louisville Cotton Oil Company, refiners at Louisville, Ky., it

submitted a sample of the oil to Dr. Giltner, who was in charge of the Bureau of Animal Industry inspection at the Hammond plant, and asked him to let them know if the oil was artificially colored and if it was satisfactory for them to use in oleomargarine. Dr. Giltner answered both of these questions in the affirmative.

It also was shown that the chemist of the Hammond Company used the tests for artificial color which were prescribed by the Commissioner of International Revenue in Treasury Decision No. 547, and that these tests showed no reaction for artificial color. It also proved that samples of the oil had been submitted to the Commissioner of Internal Revenue and were analyzed by the chemist of that department for artificial color, with the result that none was found.

Story of a Change of Mind.

The Hammond Company also showed that this case had been settled with the government by an offer in compromise, dated Chicago, October 15, 1912, and that in the offer of compromise the Hammond Company suggested to the Commissioner of Internal Revenue that the oil in question first came to its attention about the middle of June, 1910. It recited the steps and precaution which it took to ascertain whether the oil was free from artificial color, and contended that it had done everything it reasonably could do to determine the character of the oil.

The compromise offer consisted of five

TALLOWAND GREASE

DARLING & COMPANY UNION STOCK YARDS CHICAGO

Please submit your offerings CARLOAD OR LESS typewritten pages and ended with the following statement:

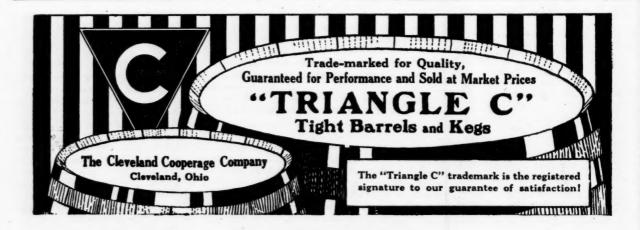
"Not admitting, but, on the contrary, denying any liability of any kind or character whatsoever, and protesting that we have done everything that as reasonable men we could be expected to do; but being aware of the injury to our business by charges of this character, and desiring to avoid the expense of protracted litigation with the Government, we do hereby offer the sum of Twenty Thousand Dollars in full settlement of all charges and all liabilities or claimed liabilities, both civil and criminal, and in full satisfaction of claims for licenses, general or special, fines, penalties, assessments or forfeitures, connected with or growing out of the charges involved, and herewith tender that amount in legal currency of the United States"

This offer reached the Office of the Commissioner of Internal Revenue on the 28th day of October, 1912. That office held the offer under consideration until March 5, 1913, meanwhile making a full and complete investigation, sending their representatives into the Hammond plant to check the books and accounts of the company and also getting data from the railroads at Louisville showing just when and where shipments of the oil were made.

On March 5, over the signature of R. E. Cabell, then Commissioner of Internal Revenue, the Treasury wrote to the G. H. Hammond Company as follows:

"I have considered the proposition submitted by you on the 28th day of October, 1912, for a compromise of your liabilities on account of artificially coloring oleomargarine and selling the same without payment of the required stamp tax, and violation of Sections 8, 17 and 18, Act of August 2. 1886, and have decided with the advice and consent of the Secretary of the Treasury to accept.\$20,000.00 as specific penalty in lieu of both civil and criminal liabilities, no assessments of special or stamp taxes to be made, and thus close the case."

It now appears the Government is attempting to assert that the settlement refers to only a part of the period during which the oil in question was used. To a mere layman it would seem that, in view of the clear, concise and comprehensive language of the offer of acceptance, it was the intention to settle all of the matters connected with or growing out of the use of the oil in question. Now those responsible for this prosecution appear to be using court processes as an excuse for going back on an agreement.



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THE WEEK'S CLOSING MARKETS

FRIDAY'S CLOSINGS.

Provisions.

Hog products were quiet with strong commission house buying, light offerings, good cash demand, firm hogs, foreign strength and heavy shipments. Lard stocks increased only 3,000,000 lbs. during February with a total of 11,000,000 lbs. against 20,000,000 lbs. last year. Total meats were about 115,000,000 lbs. against 75,000,000 lbs. last year. 75,000,000 lbs. last year.

Cottonseed Oil.

Cotton seed oil was very firm with light Cotton seed oil was very firm with light offerings, scattered southern and western commission house buying, firmness in crude cottonseed oil and lard. Profit taking checked advances. September sold the new highs for season. Packers are paying 10 cents for crude cottonseed oil in the southeast, and Texas is quoted 9% cents asked. Cash trade is fair.

Quotations on cottonseed oil at Friday noon were: March, \$11.18 bid; May, \$11.48@11.50; July, \$11.68@11.70; September, \$11.58@11.60; October, \$10.75@11.00.

Tallow.

Extra, 9c.

Oleo and Stearine.

Sales, 10¼c; extra oleo oil, 13½c.

FRIDAY'S GENERAL MARKETS.

New York, March 3, 1923.—Spot lard at New York, prime western, \$12.35@ 12.45; Middle West, \$12.15@12.25; city steam, \$12.00; refined, continent, \$13.25; South American, \$13.50; Brazil, kegs, \$14.50; compound, \$13.50.

\$14.59; compound, \$13.50.

Liverpool Provision Markets.

Liverpool, March 3, 1923.—(By cable.)

—Quotations today: Shoulders square,

57s (\$13.45); shoulders, picnics, 61s
(\$14.40); hams, long cut, 82s (\$19.35);

hams, American cut, 81s (\$18.92); bacon,

Cumberland cut, 71s (\$16.76); bacon, short

backs, 68s (\$16.03); bacon, Wiltshire, 64s
(\$15.11); bellies, clear, 97s (\$22.91); Australian tallow, 38s 5d@41s 5d (\$9.06@

9.68); spot lard, 65s 5d (\$15.22).

Hull Oil Market.

Hull, England, March 3, 1923.—(By

cable).—Refined cottonseed oil, 42s 6d
(\$10.03); crude cottonseed oil, 37s 5d
(\$8.83).

(\$8.83).

ARGENTINE BEEF EXPORTS.

Cable reports of Argentine exports of beef for the week up to March 2, 1923, shows exports from that country were as follows: To England, 149,736 quarters; to the Continent, 33,824; to other ports, none. Exports for the previous week were as follows: To England, 171,602 quarters; to the Continent, 28,125 quarters; to other ports, none. ports, none.

SLAUGHTER HOUSES IN BUENOS

The following tabulation is reported to the U. S. Department of Commerce from Buenos Aires, Argentina, regarding the cattle, sheep and hogs killed in 1922:

153,259	215.981	
	215,981	5,183
125,774	499,687	5,637
156,726	734,728	14,692
156,412	482,137	19,417
183,316	419,260	43,700
203,641	274,935	56,063
198,957	202.388	51.142
156.288	133,035	37,630
151.900	178,453	27.751
	402.187	21,213
151,290	574,759	18,148
85,496	326,029	8,537
,873,432	4,452,579	309,113
	156,726 156,412 183,316 203,641 198,957 156,288 151,900 150,373 151,290	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Are you taking advantage of the service available on the "Practical Points for the Trade" page? Refer all questions on any feature of packinghouse practice to this depariment.

MEAT SUPPLIES AT NEW YORK.

Receipts of western dressed meats and local slaughter under federal inspection for New York City, N. Y., are officially reported for the week ending February 24, 1923, with comparisons as follows:

	Week	Week
Western dressed meats:	Feb. 24.	Feb. 17
Steers, carcasses	7,312	6,869
Cows, carcasses	1.270	1.224
Bulls, carcasses	1,2861/2	715
Veal, carcasses	6,439	8,274
Hogs and pigs	1,794	3,375
Lambs, carcasses	17,514	24,594
Mutton, carcasses	7,819	5,934
Beef cuts, lbs	166,357	129,677
Pork cuts, 1bs	281,783	1,472,679
Local slaughters, Federal inspection	:	
Cattle	9,890	10,067
Calves	13,112	10,636
Hogs	54,580	58,420
Sheep	36,548	32,654

MEAT SUPPLIES AT PHILADELPHIA.

Receipts of western dressed meats and local slaughter under city and federal inspection at Philadelphia, Pa., are officially reported as follows for the week ending February 24, 1923, with comparisons:

Western Assessed to the	Week	Week
Western dressed meats:	Feb. 24.	Feb. 17
Steers, carcasses	. 2,619	2.882
Cows, carcasses	422	452
Bulls, carcasses	. 23	13
Veal, carcasses	1.152	1.654
Lambs, carcasses		7.466
Mutton, carcasses		2,306
Pork, 1bs		554,384
Local slaughters:		002,004
Cattle	. 2.400	2.188
Calves	. 1,448	2,177
Hogs		22,283
Sheep		5,404

MEAT SUPPLIES AT BOSTON.

Receipts of western dressed meats and slaughter under federal and city inspection at Boston, Mass., are officially reported as follows for the week ending February 24, 1923, with comparisons:

	Week ending	Week
Western dressed meats:	Feb. 24.	Feb. 17.
Steers, carcasses	2,512	1.857
Cows, carcasses		1,808
Bulls, carcasses	109	79
Veal, carcasses	426	1,040
Lamb, carcasses	10,739	11,192
Mutton, carcasses	1.002	956
Pork, 1bs		259,183
Local slaughters:		
Cattle	1.248	1.267
Calves, carcasses	1,722	1.877
Hogs, carcasses	17,867	21.615
Sheep, carcasses	4,730	4.899

EXPORTS OF PROVISIONS.

Exports of provisions from the Atlantic and Gulf ports for the week ending February 24, 1923, with PORK, BBLS.

Week Week Week Nov. I. 1925		Ouk, BBI	.o.	From
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St John N R 2 004 000 425 00	Now Orleans	114	02,000	188 000
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Total, week 940 12,250,750 24,554,74	Total, week	940	12,250,750	24,554,741
Previous week 863 14,250,600 20,648,83	Previous week	863		20,648,833
	Two wooks ago	1 919		16,130,474
	Con weeks ago	040		
Cor. week, 1919 248 10,485,000 9,407,79	Cor. week, 1919	410		9,407,794
Comparative summary of aggregate exports, in lbs				rts, in 10s.,
from Nov. 1, 1922, to Feb. 24, 1923:				
			1921 to 1922	. Increase.
Pork 3,326,000 1,518,000 1,808,00	Pork	3,326,000	1.518,000	1,808,000
Pacon and hams. 258,557,400 160,284,544 98,272,85	Pacon and hams 20	18 557 400		98,272,856
				77.938.816
Latu	Latu	11000,001	200,010,121	1,000,010

RECEIPTS AT CENTERS.

		ENTERS	S.
FEBRUA	RY 24, Cattle.	1923. Hogs.	Sheep.
Chicago	. 500	15.000	2,000
Kansas City Omaha	200 100	4,000 11,500	500
Omaha St. Louis St. Joseph Sloux City St. Paul	300	6,000	1,200
Sioux City	1,500	10,000 2,800	
Oklahoma City	200	800	*****
Milwankee		700 100	*****
DenverLouisville	. 400 200	400 2,300	1,300 100
Wichita	400	1,400	
Indianapolis Pittsburgh Cincinnati	. 200	5,000 1,500 3,200	400 200
Cincinnati	300	3,200 3,500	100 1,400
Cleveland Nashville	300	3.000	300
Toronto	. 200	2,000 100	
MONDAY, FE			
Chicago	Cattle. . 19,000	Hogs. 61,000	Sheep. 20,000
Kansas City Omaha	. 19,000 . 15,000 . 8,000	22,000	8,000 13,000
St. Louis St. Joseph Sioux City St. Paul	3,500	16,500 12,000 7,000	1.000
Sioux City	. 3,500 2,000	7,000	4,000 1,000
St. Paul Oklahoma City Fort Worth Milwaukee	. 3,000 1,400	15,000 1,700 1,800	2,000
Fort Worth	1,000	1,800	500
Denver Louisville Wichita	1,900	1.200	6,600
Wichita	. 1,200 1,000	3,000 1,200	100 400
Wichita Indianapolis Pittsburgh Cincinnati	1,000	4,000 11,000	100 1,500
		3,000	100
Buffalo	. 1.600	18,000 7,000	13,000 500
Nashville	. 1,000	7,000 2,700 2,800	200
TUESDAY, FE	BRUARY	27, 1923.	200
Chicago	Cattle.	Hogs. 29,000	Sheep. 16,000
Kansas City	. 11,000 . 8,000	18,000	4,000 15,000
Omaha St. Louis		16,000 12,500	1.000
St. Joseph St. Joseph Sioux City St. Paul Oklaboma City Fort Worth	2,500	9.000	3,000
St. Paul	. 2,000 2,500	15,500	500
Fort Worth	. 700 600	1,000 1,400	
		1,400 3,500 2,700	200 400
Denver Louisville Wichita	. 300	1,600	100
Indianapolis	. 800	5.000	100
Pittsburgh	. 100	1,000 2,000	300 100
Buffalo	200	7,000 4,000	1,200
Nashville Toronto	300	1,500 500	200
WEDNESDAY,			200
	Cattle.	Hogs.	Sheep.
Chicago Kansas City	. 11,000 8,500	23,000 14,000	15,000 6,000
Omaha St. Louis	3,200	15,500	18,000 700
Sione City	4,000	12,000 13,000	8,000
St. Paul Oklahoma City Fort Worth Milwaukee	3,300	24.500	1,200
Fort Worth	1,000 1,700	2,000 2,000	300
Denver	800	1,500	6,200
Louisville	200	2,000	100
Wichita Indianapolis Pittsburgh		7,000 2,500	100
Pittsburgh	100	2,500 5,600	100 . 100
Buffalo	100	4,000 5,000	800 100
Nashville	100	2,500	
Toronto		1,100	100
THURSDAY,		Hogs.	Sheep.
Chicago Kansas City Omaha	12,000	37,000	13,000
Omaha St. Louis	4,500	8,500 19,000 12,000	5,000 11,500
St. Louis St. Joseph	1,000	12,000 11,000	6.000
St. Joseph St. Joseph Sioux City St. Paul Oklahoma City Fort Worth Milwaukee Denver	1,500	12,000 11,000 12,500 11,500 1,200 4,200 2,500 3,000	1,000 1,000
Oklahoma City	500	1,200	
Milwaukee	. 1,300	4,200 2,500	100 200
Denver Indianapolis	1,800	3,000 7,000	14,000
Pittsburgh		1.2000	300
Cincinnati Buffalo	100	2,500 3,000	100 700
FRIDAY,		2, 1923.	
Chicago	Cattle. 5,000	Hogs. 34,000	Sheep. 14,000
Kansas City		10,000	000
St. Louis	1,000	20,000	5,000
Omaha St. Louis St. Joseph Sioux City St. Paul Oklahema City Fort Worth	1,400	5,300 11,000	2,500
St. Paul	1,100	12,000	500
			200
Milwankee Denver	200	1,000 500	4,500

MEATLESS DAYS IN GREECE.

Denver Indianapolis Pittsburgh Cincinnati

1,100 1,000 1,000 200 500 600

3,500 2,000 1,000 500 7,000 2,500 4,800 3,500

Meatless days have been made compulsory in Greece. Railway rates in the same country have increased about sixtyfive per cent.

Profits Are Made Possible Through Proper Buying

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References: National Stock Yards, National Bank, and our customers

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Established 1890

U.S. Yards, Indianapolis, Ind.

Buyers of Hogs on Commission

References Live Stock Exchange Bank

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Cattle, Calves, Sheep & Hogs

on commission
McMurray & Johnston

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Established 1900

Cleveland, Ohio

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P. C. KENNETT & SON Union Stock Yards, Montgomery, Ala.

KENNETT, COLINA & CO. Union Stock Yards, Cincinnati, Ohio KENNETT, SPARKS & CO.
National Stock Yards, E. St. Louis, Iil.
KENNETT, MURRAY & DARNELL
Union Stock Yards, Indianapolis, Ind.

KENNETT, MURRAY & CO.
Union Stock Yards, Lafayette, Ind.
KENNETT, MURRAY & COLINA
M. C. Stock Yards, Detroit, Mich.

J. W. MURPHY OMAHA

Buyer of Hogs on Order

SPECIAL ATTENTION GIVEN YOU WILL BE PLEASED

6 COMPETENT BUYERS 7 ASSISTANTS

We Handle Hogs Only
Utility and Cross Cypher

Reference: Any Meat Packer

Hog Buyers Exclusively

WALKER-WATKINS

National Stock Yards, III.

--- References ---National Stock Yards National Bank Drovers National Bank

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Cattle Calves Hogs Lambs

Henry Knight & Son

Bourbon Stock Yards Louisville, Ky.

Reference: Dun & Bradstreets

JOHN HARVEY & CO.

Order Buyers

Cattle Exclusively

OMAHA, NEB. SIOUX CITY, Iowa

References: Live Stock National Bank, Omaha

Utility Cipher

DENVER REPRESENTATIVES, A. W. Hand & Co.

E. E. JOHNSTON

Established 35 Years

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Live Stock Exchange

East Buffalo, N. Y.

The National Provisioner Keeps you posted on The Men and the Markets

CANADIAN HOG MARKETS.

Sales of hogs at chief Canadian centers for the week ending February 22, 1923, are reported as follows by the Markets Intelligence Division of the Dominion Department of Agriculture, as compared to a week and a year ago:

		-Sal	es	-
	Week ended Feb. 22.	Same week, 1922.	Year to date, 1923.	Year to date, 1922.
Toronto		6.184	48,781	48.823
Montreal (W.		1.927	22,397	13,974
		982	7,811	6,277
Winnipeg		2,714	47,960	30,143
Calgary	 . 2,514	1,882	21,114	17,255
Edmonton	 . 2,533	988	20,667	0.163
Total	 . 16,494	14,677	168,700	125,644

NEW YORK LIVESTOCK.

The following are the receipts for week nding Saturday, February 24, 1923:

ending Saturday,	rent	lary 21,	1320.	
Jersey City New York Central Union	Cattle.	Calves.	Sheep.	Hogs.
	3,981	9,804	15,005	10,622
	1,358	2,421	1,966	21,989
	4,102	640	16,595	490
Total for week Previous week Two weeks ago	9,441	12,865	32,566	32,701
	8,910	10.484	30,589	34,293
	9,229	9,213	26,456	30,474

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REFERENCES:

National Stock Yards Natl. Bank or any commission firm established at this point.

LIVE STOCK MARKETS

CHICAGO.

Union Stock Yards, Chicago, March 1.

Livestock values fluctuated within nar-row limits during the week. Net price changes were small, beef steers reflecting upturns of about 15c, hogs of light and butcher weight net downturns of 10 to 15c, while fat lambs finished the period on a steady to slightly lower price basis. The proportion of beef steers eligible to sell at and above \$10.00 was noteworthy in the cattle trade. In hogs the comparative strength and active demand for packing grades caused some comment while in the ovine trade the alacrity with which fin-ishers and shearers competed with killers for lambs of practically all weights adaptable to further development and promising

generous fleeces was a feature.

Better grades of beef cows and most beef heifers sold off 25 to 40c. Bulls lost 10 to 25c and veal calves dropped \$1.25 to Locally cattle receipts for the first four days of the calendar week were about over corresponding time a week earlier. Approximately 24,000 fewer hogs and 8,000 fewer sheep arrived at Chicago during this period, while at ten large markets receipts of cattle were approximately the same as a week earlier, about 12,000 fewer hogs and sheep arriving at these

ten market points.

Best matured steers averaging 1,324 lbs. made \$10.50. Many loads cashed at \$10.25, a few at \$10.35 to \$10.40, a considerably larger quota made \$10.00. In all more than 700 fat steers turned at and above \$10.00. These prices reflected not only higher values but seasonal improvement in killing quality. Exporters bought moderately at \$9.00 to \$9.25. Highly finished erately at \$9.00 to \$9.25. Highly finished yearlings were scarce, a few lots making \$10.25 to \$10.50. Most youngsters turned under \$9.50 and bulk of beef steers and yearlings sold actively at \$8.35 to \$9.90. The proportion of fat steers on killing account under \$8.00 was meager and consisted meather forwards and medium light. sisted mostly of common and medium light yearlings, too plain in quality to attract feeder buyers

Choice light heifers in load lots sold upward to \$9.50 but beef heifers were most numerous at \$6.25 to \$7.00, a few plain light kinds selling below \$5.50 to killers. Fat cows were most numerous at \$4.50 to \$5.50. Cows of value to sell above this outside figure were slow movers and reflected maximum declines. A few choice heavy Kosher cows, however, made \$7.25

to \$7.50 and above.

Canners and cutters were most numerous at \$3.25 to \$4.25. Relatively few beef bulls exceeded \$5.00 as the week closed, bulk there turning at \$4.65 to \$4.85. Today's trade in veal calves was a \$10.00 to \$10.25 affair for desirable vealers to packers, a few reaching \$11.00. Veal cali ers, a few reaching \$11.00. Veal calf prices generally were in marked contrast with the recent high time when many of the best vealers turned at \$14.00 to \$14.50 to \$hinners to shippers.

The decline in hogs is measured from peak prices a week earlier, when top was \$8.60. Compared with the close of last calendar week, values on all classes are 10 to 15c higher. Shipping demand was fairly broad, considerable activity and less unevenness marked the trade, indicating that hogs are in demand at existing price levels which are sharply below correspond-

ing time a year earlier.

On March 1 a year ago, hogs topped at \$11.20. Today top light hogs rested at \$8.35 when bulk of 150 to 225-lb. averages turned at \$8.15 to \$8.30 and 300-lb. butchers sold upward to \$8.00, some 240-lb. butchers making \$8.15. Packing sows moved freely at \$7.25 with several lots upward to \$7.35. A week ago most packing sows were turning at \$6.85 to \$7.15.

Although handy Colorado lambs made \$15.50 early in the week best price to killers at the close was \$15.25. Relatively

few 90-lb. lambs exceeded \$15.00 and killers and finishers took 93 to 95-lb. kinds at \$14.50 to \$14.75. Shorn lambs were plentiful and desirable weight offerings cashed mostly at \$12.00 to \$12.50, early fall shorn descriptions making \$13.00 to \$13.25. The supply of wooled and shorn lambs of objectionably heavy weights was rather large. Wooled lambs averaging 100 to 110-lbs. sold downward to \$13.00 and shorn kinds of comparable weight often dropped to \$10.00, a spread of \$10.00 to \$10.50 taking most strongweight clipped offerings.

Choice 92-lb. fed yearlings in fleece made \$13.25, the supply of 102 to 105-lb. shorn yearlings at \$9.50 to \$9.75, with 99-lb. kinds upward to \$10.25 being rather Heavy aged wethers sold upward liberal. Heavy aged wetners som upward to \$9.00 in fleece, some heavy shorn kinds making \$7.00 to \$7.25. Light fed ewes made \$8.75 but a price spread of \$8.00 to \$8.25 took bulk of best offerings, some shorn ewes turning around \$6.50. developed for bred ewes for Kentucky account at prices in line with fat values.

KANSAS CITY.

(Special Letter to The National Provisioner.) Kansas City Stock Yards, February 28. Rather wide fluctuations occurred in

prices for livestock this week and today the market for cattle is about the same as the market for cattle is about the same as a week ago. Hogs are slightly lower, and sheep about steady. Receipts of cattle are about normal for this season of the year and the hog runs are holding about 50 per cent above a year ago. Indications are that the general movement of livestock will continue in about this proportion for the next thirty days tion for the next thirty days.

The few choice to prime steers here this week sold at \$9.25 to \$9.75, or about as high as they have been bringing for the past three weeks. Good to choice steers sold at \$8.50 to \$9.25, and the plainer classes of native fed steers sold at \$7.50 to \$8.25. Some Oklahoma and Texas meal fed steers sold at \$6.75 to \$7.50, and Colorado pulp fed steers brought \$7.50 to \$8.25. The bulk of the fat cows sold at \$4.50 to \$5.75 with choice classes at \$6.00 to \$6.75. Fat heifers brought \$5.50 to and steers and heifers mixed sold 50 to \$9.00. Veal calves are \$1.00 at \$7.50 to \$9.00. lower than the extreme high point last week with a few choice light weight grades selling up to \$11.00, and the bulk of the calves bringing \$9.00 to \$10.50.

Hog prices broke sharply Monday, rallied strongly Tuesday, and today were steady to around 10c lower and in about the same position as late last week. The top price today was \$8.15 and the bulk of the offerings, which were in the 190-215-lb. class, sold at \$7.85 to \$8.10. Packing sows sold at \$6.75 to \$7.00 and pigs brought \$7.25 to \$7.65. Most of the hogs coming are good smooth bunches that have been on corn and both from quality and killing percentages are well suited to current demand.

Lamb prices here were slightly higher Tuesday but lost the advance today. Sheep Tuesday but lost the advance held steady and are selling readily at present quotations. Choice light weight bringing \$14.35 to \$14.65, lambs are bringing \$14.35 to \$14.65, medium weight lambs \$13.85 to \$14.25, and heavy lambs \$12.25 to \$13.65. Fat wethers are quoted at \$8.00 to \$9.25, and fat ewes \$7.00 to \$8.50. A few yearlings sold at \$12.00 to \$12.75.

ST. LOUIS.

(Special Letter to The National Provisioner.)
National Stock Yards, Ill. February 28.

With a moderate supply of approximately 21,000 head of cattle for the ing today, prices while varying some, average steady with perhaps a stronger tendency on offerings with quality and finish. On Monday a two-car lot of steers averaging 1,322 lbs. brought \$9.75, which is the top sale of the period. The bulk of

the suitable kind for killers range from \$8.00@9.00, the common and grades ranging from \$6.75@8.00.

There is an ample demand to take care of all of the steer offerings and a like-wise good demand for the light weight yearling kinds, the better ones in the lat-ter grade ranging from \$7.75@8.50, but the heavier proportion of these are of the common and medium grades which are cashing from \$5.00@7.50. Cows are quoted some lower for the week, in spots, around 25c

Most of the butcher offerings are bringing \$4.25@6.00, with the better kinds going up to \$7.00. Canners and cutters hold a strong basis and are bringing \$2 3.75; bologna bulls, \$4.00@5.00; beef kinds,

The hog run this week was very liberal. indeed, the count totaling 106,000 for the week ending today. Early in the period prices broke somewhat, but in the last two days we have had a sharp advance so that at this writing, we are about steady with a week ago. The heavy Eastern buying holds shipping weight hogs well to the top of the market, although the demand is sufficient to absorb all of the offerings in the butcher and heavy classes.

the butcher and heavy classes.

Today's quotations are: Mixed and butchers, \$8.25@8.40; good heavies, \$8.00 @8.10; roughs, \$7.00@7.10; lights, \$8.40@8.50; pigs, \$7.25@8.00; bulk, \$8.20@8.40.

There is a good demand with steady prices in the sheep house. The run this week was very light, there being not more than 5,000 registered. Mutton sheep of handy weight are selling at \$7.75@8.25; plain and heavy ewes, \$6.50@7.00. Fat handy weight lambs are selling around handy weight lambs are selling around \$15.00, while medium grades are bringing \$14.25@14.75. A few choice lambs are d. These are topping the \$14.25@14.75. A few choice lambs are being received. These are topping the market at \$15.25 and could be good enough to bring a little more money.

OMAHA.

(Special Letter to The National Provisioner.) South Omaha, Neb., February 28.

Cattle are still coming to market very freely with no material change and a very ordinary quality of the offerings. Demand from both local packers and shippers has been healthy for the desirable offerings and prices were sustained as a rule, while on the plainer cattle the movement has been sluggish and values have shaded off to some extent. Strictly good to choice beeves and yearlings have been comparatively scarce and sold readily at \$8.75@ 9.50, the bulk of the fair to good warmed up and short fed steers going around \$7.75 @8.50 with the commoner lots from \$7.50 down.

Outlet for cows and heifers has been rather broad right along and trend of val-ues has been higher, the advance amounting to 15@25c as compared with a week Best corn fed heifers find a ready at \$7.25@8.25, fair to good butcher and beef stock is moving readily at \$5.00 @6.25, and canners and cutters at \$2.75@ 3.75. Veal calves at \$5.00@11.00 are somewhat lower than a week ago but bulls, etc., are somewhat stronger

Notwithstanding the very liberal re-ceipts of hogs, the demand has been sufficiently broad to absorb the offerings readily at prices that compare very favorably with last week. Eastern shipping demand has picked up considerably of late and has picked up considerably of late and there is a good outlet for practically all classes of hogs. With 16,000 fresh hogs on sale today the market was about a nickel higher. Best light weights brought \$7.95 against \$8.00 on last Wednesday and bulk of all the hogs sold at \$7.75@7:90, against \$7.85@7.95 a week ago.

No great change has taken place recently in the market for sheep and lambs and the liberal offerings have been sold readily at full last week's levels. Fat lambs are selling at \$12.80@14.60, yearlings at \$11.75@13.25, wethers at \$7.50@9.00, and ewes at \$5.25@8.25.

9.00, and ewes at \$5.25@8.25.

ST. JOSEPH.

(Special Letter to The National Provisioner.)

(Special Letter to The National Provisioner.)

South St. Joseph, Mo., February 27.

Receipts of cattle for two days this week numbered around 6,200, compared with 6,639 same days last week. Arrivals included a good assortment of steers of varied weight and quality. While Monday's trade ruled steady at a shade lower, Tuesday's market was active and steady to 10c higher, which left values about steady with last week's close. Best steers, some horned natives averaging 1,226 some horned natives averaging 1,226 pounds, sold at \$9.25 and bulk of all sales ranged \$7.75@8.75. Colorado pulpers sold \$8.00@8.40, Nebraska's \$8.40, Utah's \$8.30 @8.35, and Idaho's \$7.40@8.50.

@8.35, and Idaho's \$7.40@8.50. The supply of butcher stock was only moderate and prices show no change for the two days. Odd lots of choice cows ranged up to \$6.50, with bulk of good kinds selling \$4.75@5.75, including three loads of Nebraskas at the latter figure. A load of Colorado made \$5.90, and a load of Colorado heifers \$7.25. Heifers in load lots ranged \$6.75@7.65, with odd head above \$8.00.

above \$8.00.

Mixed yearlings were fairly plentiful and quality fair to good. Best kinds sold \$8.00@8.35, with most sales from \$7.25@ 7.85. Canner and cutter cows sold mostly \$2.50@4.00. Bulls show no change for the period. Choice heavy bulls ranged up the period. Choice heavy buils ranged up to \$6.25, and few sales went under \$4.00; calves 50c lower than last week's close, tops selling at \$10.00.

Receipts of hogs for two days about 18,000 against 21,448 corresponding period

18,000 against 21,448 corresponding period last week. Monday's trade ruled slow and steady to 10c lower. The top held at \$8.00, which was the same as last Saturday, and bulk of sales ranged \$7.80@7.95. Tuesday's market was active and 10@15c higher. The top was \$8.10 and bulk of sales \$7.90@8.10. Throwout packing sows were 15@25c higher, selling mostly at \$7.10. Stags sold \$6.25@6.50.

Sheep receipts for two days numbered around 13.100 compared with 16,929 same

around 13,100 compared with 16,929 same around 13,100 compared with 16,329 same period a week ago. As of late bulk of offerings were lambs from Nebraska and Colorado feed lots, and weights did not run quite so strong as the previous week. There was a good demand for all killers and prices show a gain of fully 25c for the two days. Heavy and medium weight the two days. Heavy and medium weight lambs are as much as 50c higher in some cases. The top Tuesday was \$14.75 for 89-pound lambs, and bulk of sales ranged \$14.25@14.75. Lambs weighing 94 pounds sold up to \$14.25. Ewes sold \$8.25@8.50, yearlings \$12.00@12.35 and wethers \$9.00. A few feeding lambs sold at \$14.25.

SIOUX CITY.

(Special Letter to The National Provisioner.) Sioux City, Ia., Feb. 28.—Cattle have continued to come forward in very moderate volume, but have been about equal to the demand. Considering the season the beef demand has been apparently good and has readily absorbed the suppoles of fat cattle which are running relatively larger than is the call for cattle to go back to the country. Prices for attractive and useful grades of beef steers are somewhat higher than at the extreme finish of last week, beef steers being quoted around 15 to 25 cents higher than a week ago while killer grades of she stock are rated as 10 to 15 cents higher.

There have been a few well finished but not prime beeves selling at \$9@\$9.50 with bulk of beef steers at \$8@9 for fair to good quality, while the warmed-up grades have been going at \$7@7.75. A few rough and light killer steers have sold at \$6.50 and under. A few weeks later these same grades will perhaps be going out for

spring and summer pasturing.

Corn fed heifers, fat and choice, have sold at \$7.50 in car loads, while choice beef cows have made \$6 and a little better. Bulk of cows and helfers, \$5.25@6, canner and cutter grades down to as low Veal prices have declined some

what, but with choice lots still quotable at \$10.50. Bulls, \$4.50@5.

The hog supply has continued liberal with receipts around \$60,000 probable for the completed week. February brought 237,000, the second largest February run in the history of these yards. Just why the market runs as it does continues to puzzle the talent. Prices are kept so close to Chicago basis that there is no shipping margin and it has come to be a common affair that the market opens lower in the morning and closes strong and higher each day.

It has been suggested that this is a ruse on the part of packers to get their country buyers started off in the morning on their "so much under Sioux City basis," and then let the market run its course and then let the market run its course after the wires have gone out to the country buyers. At any rate, to day, Wednesday, for instance, the market opened slow and weak to 5 cents lower, then after about middle of the session there was a balloon ascension that sent prices to about a dime over the morning price basis. While the country packer buyers were getting lined up for action it was a \$7.75@ 7.80 market, then, later on, it was a \$7.80

(Continued on page 49.)

PACKERS' PURCHASES.

Purchases of livestock by packers at principal cenrs for the week ending Saturday, February 24, 1923, reported by The National Provisioner as follows: CHICAGO.

CIII	CILCO.		
	Cattle.	Hogs.	Sheep.
Armour & Co	6,330	24,000	15,557
Swift & Co	6,934	16,400	15,743
Morris & Co	6,208	24,500	9,732
Wilson & Co	5,151	21,400	9,490
Anglo-Amer. Prov. Co	850	8,100	
G. H. Hammond Co	2,429	7,400	
Libby, McNeill & Libby.	1,140		
Brennan Packing Co.,	6,700 hos	gs; Miller &	Hart,
6,400 hogs; Independent	Packing	Co., 9,700	hogs;
Boyd, Lunham & Co., 7,	000 hogs	; Western	Packing
& Provision Co., 12,900 l		erts & Oak	e, 6,200
hogs; others, 21,500 hogs			

KANSAS CITY.

NAND	vo our	I.		
	Cattle.	Calves	. Hogs.	Sheep.
	3,113	1.183	10,070	3,461
Cudahy Pkg. Co	9.050	1,181	8,289	3,217
Cudany Pkg. Co				
Fowler Pkg. Co	910	10	*****	0.011
Morris & Co	4,236	1,314	10,621	2,641
Swift & Co		970	16,998	3,838
Wilson & Co	4.018	644	12,413	3,600
Local butchers	798	153	1,755	1
Total	20.190	5,455	60,146	16,758
03	IAHA.			
	Cattle.	H	ogs.	Sheep.
Morris & Co	3,660	12	.691	4,592
Swift & Co	5,218	17	,448	13,880
Cudahy Pkg. Co			,831	10,483
Armour & Co			.422	13,487
Dold Pkg, Co			458	201201
			23	
Higgins Pkg. Co				
Midwest Pkg. Co	. 25			
Omaha Pkg. Co				
S. Omaha Pkg. Co Lincoln Pkg. Co				
Nagle Pkg. Co	157			
Wilson Pkg. Co				
			.810	
J. W. Murphy			.301	
				11,730
Others	. 13,004	4)	,802	11,730
Total	34,044	91	,786	54,172
, ST.	LOUIS			
	Cattle.	33	ogs.	Sheen.
Armour & Co			.051	2,379
Armour & Co				
Swift & Co		8	,413	2,007
Morris & Co			67	144
St. Louis Dressed Bee	931			
			401	
Independent Pkg. Co			,481	*****
East Side Pkg. Co			,453	422
Heil Pkg. Co			,605	
American Pkg. Co	. 20	2	,470	
Krey Pkg. Co	. 81	1	,408	
Sartorious Prov. Co	. 11		359	
Sieloff Pkg. Co		1	.010	
Butchers			.717	1,398
	-	-		21000
Total	. 15,822	85	6,034	5,350
ST.	JOSEPH	I.		
	Cattle.	Calve	s. Hogs.	Sheep.
Swift & Co		735	27,358	16,201
Hammond Pkg. Co	2.608	711	11,625	2,679
Morris & Co	9 900	592	14,184	
MOTTIS & CO	4.4(3)	392	17,181	2,244

Swift & Co	3,296	735	27.358	16,201
Hammond Pkg. Co	2,608	711	11,625	2.679
Morris & Co	2.209	592	14.184	2,244
Others		252	9,478	8,115
Total	10,998	2,290	62,645	29,239
8101	X CIT	Y.		
	Cattle.	Calves.		Sheep.
Cudahy Pkg. Co		209	20,986	3,195
Armour & Co		72	21,984	1.421
Swift & Co	959	26	851	
Sacks Bros. Pkg. Co	33	28		
Smith Bros. Pkg. Co	67	24	17	****
Local butchers	73	28		
Eastern packers	. 34		16,786	
Total	6,420	387	60,624	4,616

OKLAH	OMA (CITY.		
	Cattle.	Calves.	Hogs.	Sheep.
Morris & Co	1,606	932	5,468	
Morris & Co	1,459	782	5,468 5,717 364	28
Other butchers	67	14	364	
Total	3,132	1,728	11,549	
SUTP.	DATIT			****
ST.	C-ML	Calves. 6,755 4 384	**	CIL.
Swift & Co	Cattle.	e 755	41 599	Sheep.
Armour & Co	2,986 2,114		27.632	2,104
Swift & Co	313			-1203
	SHEE	142	****	****
	38 518	40 375	9,875	****
Others	STO	919	9,810	208
Total	6.277	11,759	79,089	4,518
	INNAT			-10-40
	Cattle:	Calves	Hogs	Sheep.
E. Kahn & Son	629	142	2,669	134
Kroger Groc. & Bak. Co	284	56	157	
E. Kahn & Son Kroger Groc. & Bak. Co A. Fruend Gus Juengling J. F. Schroth Pkg. Co	85	57	215	****
I F Schroth Pkg Co	13	91	2,830	28
H. H. Meyer Pkg. Co	20		2,875	****
John Hilberg & Sons	97 13 20 127 102			35
W. G. Rehn's Sons	102	****		
Kroger Groc. & Bak. Co. C. A. Fruend. Gus Juengling J. F. Schroth Pkg. Co. H. H. Meyer Pkg. Co. John Hilberg & Sons. W. G. Rehn's Sons. Peoples Pkg. Co. J. Bauer & Son. A. Sander Pkg. Co. J. Vogel Sons. John Hoffman's Sons Co. Lohrey Pkg. Co. Lohrey Pkg. Co. Lohrey Pkg. Co.	102 139 54	180	* * * *	
A. Sander Pkg. Co	94	****	1,193	****
J. Vogel Sons			875	****
John Hoffman's Sons Co.			397	
Lohrey Pkg. Co			201	****
Sam Gall			845	127
Ideal Pkg. Co				35
				35
F. Blackburn				27
Total	1,250	590	11 054	450
TotalINDIA	NAPOI	LIS	11,254	416
	COALS.	Calman	Hogg	Sheep.
Kingan & Co	1.675	377	Hogs. 16,945	107
Moore & Co			3.076	
Ind. Abat. Co	1,465	50 8	3,025	212
Armour & Co	3	8	3,347 930	69
Brown Bros	146	24	122	20
Schussler Pkg. Co	41		495	****
Meier Pkg. Co		6	335 135	****
Ind Prov Co	0	16	369	****
Worm & Co	118		425	
Eastern buyers	1,472	3,933	18,018	895
Hilgemeier Bros. Brown Bros. Schussler Pkg. Co Meier Pkg. Co Riverview Pkg. Co Ind. Prov. Co Worm & Co Eastern buyers Miscellaneous	383	AM	243	39
Total	5,419	4,562	47 485	1.342
	CHITA		11,100	1,014
	Cattle.		Home	Cibon
Cudahy Pkg. Co	883	Calves. 968	Hogs. 7.227	Sheep.
	209	10	7,227 $4,922$	041
local butchers	90	5		****
Total	1,182	983	12,149	324
	NVER.		12,170	024
			**	00
	733	Calves.	Hogs.	Sheep.
Armour & Co	409	85	$\frac{2,730}{3,276}$	1,130 2,015
Armour & Co	254		1,018	
Miscellaneous	370	41	1,207	915
Total	1.788	210	8,261	4,060
	VAUKE		0,201	2,000
MILV	Cottle	Colvo-	Hone	Oheer
Plankinton Pkg. Co	1.107	Calves. 11,809	Hogs. 8 307	sneep.
Plankinton Pkg. Co Swift & Co R. Gumz & Co F. C. Gross & Co Butchers	47	21,000	1,509	
R. Gumz & Co		50 342	220	34
C. C. Gross & Co	87 227	50	67	21
Butchers	300	342 107	162 30	38
-				****
Total	1,891	12,308	10,295	96
RECAPI				
D 11 1 11 1				

OELAHOMA CITY

RECAPITULATIO Recapitulation of packers' purc for the week ending February 24 parisons:	haces he markets
Cattle.	
Week	ending Previous
	ary 24, week.
	9.042 32.162
	0.190 21.480
	4.044
	5,822 16,342
	0,998 12,150
Sioux City	6,420 7,287
Oklahoma City	3,132 3,531
South St. Paul.	6,277 4,242
Indianapolis	1,250 1,455
Wichite	5,419 5,216
Wichita	1.182 772
Denver	1,766 2,098
Milwaukee	1,891 1,052
Fort Worth	6,937
Hogs.	
Chicago	8.000 136.000
	0,146 48,504
	1,786
	5,034 71,646
	2,645 48,916
	0,622 59,564
South St. Paul.	1,549 8,835 9,089 50,542
	1,254 9,398
	7,465 34,216
	2,149 8,284
	8,261 10,095
	0,295 5,215
Fort Worth	13,540
Sheep.	
Chicago	50,522 47,584
	6,758 21,422
	4.172
St. Louis	5,350 5,132
	9,239 27,698
Sioux City	4.616 2.705
Oklahoma City	28 131
South St. Paul	4.518 3.248
Cincinnati	
Indianapolis	416 313 1.342 556
Wichita	
Denver	
Milwaukee	
Fort Worth	1.474

923.

Sheep.

4,518

28

20

1,342

324

915 4,000

16,342 12,150 7,287 3,531

71,646 48,916 59,564 8,835 50,542

28

HIDE AND SKIN MARKETS

(SHOE AND LEATHER REPORTER)

Chicago.

PACKER HIDES.—Business is at a standstill. Inquiry is still reported for light cows but no business has developed as buyers' views are quite low. Sellers ask 15c in the absence of bids they can consider. Native steers are quoted quiet at 19@20c; Texas 17½@18c; butts 17½@18c; colorados 16½@17c; branded cows 18c; heavy cows 15½@16½c; lights 14@15c; bulls 13¾c; branded 11½c.

COUNTRY HIDES.—Utter stagnation grips the situation in country hides due to the wide differences in ideas of buyers and sellers. The larger sellers are holding aloof from participation in the market at this time, feeling that the present nervousness will shortly be reversed. These sellers are talking prices ruling a month or so ago as their ideas. Buyers complain of the narrow, or lack of, margin between the raw and finished products and insist that raw stock values must recede. The first collectors are timid and generally accept the low prices tanners offer.

A thorough canvass of the local buyers revealed that they were all virtually out of the market and where willing to bid talked on a basis of 12c for all weights which would indicate a basis of 11½@11¾c for buffs and about a cent more for the lights. Tanners seem determined to get goods at their views or pass up all lots. It develops that most of them have material for their immediate future needs and can afford to look on for a while.

Some country bulls sold at 10¾c recently, and most of the unsold parcels are held for 11c now. All weight outside hides are offered at 12½c as a rule with bids at 12@12¼c made and generally refused.

Some quiet business was recently effected at the bid levels. Heavy steers display no new features, being quoted about 13¼ at 13c asked locally, while outside parcels range at 12@12½c and the inside the ideas of most tanners for stock containing but few grubs. Extremes are valued locally at 13¾ @14c, while outside parcels of grub free stock are quoted at 13½c paid. Mixed qualities are quoted at 13½c paid. Mixed qualities are quoted at 13½c paid. Mixe parcels of grub free stock are quoted 13½c paid. Mixed qualities are quoted at 13@ 13¼c for descriptions. Branded country hides are quiet at 10@10½c flat basis; country packer branded hides recently sold up to 12¼c for mixed qualities; bulls 10½@10¾c paid and country packers quoted at 12@12½c; glue hides quoted

NORTHWESTERN HIDES.—Twin Cities markets are quiet and waiting with late business tending to clear the market of surplus holdings. All weight hides are valued at 12½c delivered basis and bids range at 12@12½c. Heavy hides while held at 12½c and unsalable at over 12c delivered basis. Light hides of grub free description lately sold at 13½c and that figure is still demanded with buyers talking down to 13c, especially on lots containing a moderate percentage of grubs. Bulls quoted 10½c: kipskins lately made 14c for good descriptions of mixed stock. Calfskins quoted at 14@17½c as to lots with the outside talked on cities. Horse hides \$4.75@5.25 flat f. o. b. asked.

CALF AND KIP.—Quietness continues 8@9c. NORTHWESTERN

hides \$4.75@5.25 flat f. o. b. asked.

CALF AND KIP.—Quietness continues the feature of the calfskin situation. Buyers indicate that they consider the situation as weak, due to gradually accumulating supplies and the fact that the spring run of skins is but a couple of weeks away at the most. Late sales of city skins were at 18c. Buyers feel that this price is a trifle high. Packers last sold at 18¼c, which is considered full market. New York skins have been quite active in the past week or so and at strong levels. Despite this condition western varieties still seem easy in tone. Outside first salted skins quoted at 16@17¼c and resalted lots at 14@16c; deacons \$1.00@1.10; slunks \$1.25@1.40; outside asked; kip-

skins are quiet and nominal with cities and packers quoted 16½@17c nominal and the inside nearer buyers' views. Outside

descriptions 13@16c. MISCELLANEOUS MARKETS. - Dry MISCELLANEOUS MARKETS.— Dry hides are quiet at 18c asked. Renderer horse quoted \$5.25@5.55 for business and up to \$6.00 asked. Mixed descriptions are quoted at \$4.75@5.25 and country run \$4.25@4.75 with demand not so keen. Packer pelts are waiting at \$3.47½@3.60 paid, with the market now well sold out. Fall clips \$1.75 and shearlings \$1.05@1.10. Small packer pelts quoted \$3.15@3.40 paid; dry westerns 27½@30c asked, with stocks small. Pickled skins \$5.50@8.00; hogskins 15@25c.

PACKER HIDES.—No business passing in city slaughter stock. A few brands are wanted but native varieties are featureless. Tanners would operate at 17c for butts and 16c for Colorados and there is a report current that some quiet business went over in Colorados at 16c. Natives last sold at 19½c and are considered top at 19c now by buyers. Cows, 14@14½c nominal. nominal

nominal.

SMALL PACKER HIDES.—Action in eastern small packer hides is waiting for the cue from the big packer situation. Late business was effected in all weight current slaughter cows at 14@14½c range and the inside is the very best tanners will do now. Steers quoted 17½@18½c for descriptions. Recent sales of earlier descriptions. Recent sales of earlier slaughter reported at 19c basis for heavies. Some branded steers of current kill made

16c.
COUNTRY HIDES.—Eastern tanners are COUNTRY HIDES.—Eastern tanners are exerting themselves to depress the markets and in furtherance of this object are remaining passive unless radically lower prices will be considered. Late business in Canadian choice quality extremes went over at 13½c flat basis, stock being trimmed, washed and otherwise specially handled. Seven or eight cars were involved. Several cars of Southern light hides, tick free, sold at 12½c flat. Ohio light stock is held at 13@14c for grub free lots. Western grub free lights are available at 13½c without exciting interest as buyers think 13c a sufficiently high enough price. Operations are generally waiting for later developments. Buffs are usually slow and priced at least a cent under the lights as to sections.

for later developments. Buffs are usually slow and priced at least a cent under the lights as to sections.

CALFSKINS.—An improving demand is noted for trimmed New York city calfskins and 10,000 additional moved, bringing \$1.55, \$2.25 and \$2.90, steady with the previous levels paid. Some sellers decline to consider \$1.55 and demand \$1.60 for lights. Heavier weights are slower sale and sell at best prices available. Light veal kip sold at \$3.20, being 15c advance. Heavy kips quoted dull. Light buttermilks advanced to \$2.72½. Outside city calfskins are quoted \$1.20@1.40 basis and untrimmed stock 16½@18c for cities. At the Paris auctions, extra heavy skins advanced; others declined.

FOREIGN WET SALTED HIDES.—Frigorifico steers are well sold up to slaughter and the situation has a firm undertone by reason of the small stocks, fair demand and choice quality of material. About 6,000 Sansinena extremes moved at \$42.00, Argentine gold, or approximately 17½c landed basis. Standard varieties of B. A. frigorifico steers last sold at \$57.00, or about 23½@23½c landed, while Montevideo varieties advanced to 23¾c basis. The unsold holdings of steers total about 25,000 altogether, which traders do not consider excessive. Frigorifico type hides are quiet for the present but have been moderately active of late at 19@21c, with specific business at 20%c for the account of a large American sole leather interest. account of a large American sole leather interest. Campos and other common hides quoted at 11@14c nominal, with specific

business reported in some volume recently at 12%c. Spot hides are steady.

SLAUGHTER REPORTS.

Special reports to The National Provisioner show the number of livestock slaughtered at the following centers for the week ending Saturday, February 24, 1923: CATTLE

CALL	Lilli.		
	Week		Cor.
	ending	Previous	week.
	Feb. 24.	week.	1922.
Chicago	29.042	32,162	35,580
Kansas City	25,706	27,154	20,426
Omaha	19,716	20,633	
East St. Louis	9,815	20,000	15,461
		******	5,029
	10,276	10,284	6,379
Sioux City	6,770	7,265	5,188
Cudahy	669	717	729
South St. Paul			9,941
Philadelphia	2,400	2,188	2,260
Indianapolis	1,964	2,004	1,914
Boston	1,248	1,267	
New York and Jersey City	9.890	10,067	9.872
Oklahoma City	4,860	5,154	4.239
Milwaukee	1,541	793	11111
		100	
Chinasa Hoe		403 000	
Chicago		136,000	123,705
Kansas City	60,244	48,817	34,432
Omaha	61,221	55,382	42,595
East St. Louis	50,286		27,054
St. Joseph	53,320	39,298	32,991
Sioux City	40,839	29,048	21,920
Cudaby	16,819	16,075	9,695
Cedar Rapids	13,100		10,300
Ottumwa	15,658	8,835	13,218
South St. Paul	74.300	36,800	42,236
Fort Worth	8,500	9,400	12,800
Philadelphia	20,161	22,283	17,476
Indianapolis	25,079	20,992	11,300
Boston	17,867	21,615	
New York and Jersey City.	54,580	38,420	49,187
Oklahoma City			
Milwaukee	11,549	8,835	12,479
	10,294	5,215	9,100
Cincinnati	13,700	19,600	5,300
SHE	EP.		
Chicago		47,584	48,480
Kansas City	16,871		
Omaha	27 240	21,748	20,122
		36,740	26,411
East St. Louis	3,504	00.000	2,415
St. Joseph		22,810	12,504
Sloux City		2,326	2,974
Cudahy	229	237	221
South St. Paul			3,063
Philadelphia	4,303	5,404	5,119
Indianapolis	323	. 449	100
Boston	4,730	4,899	
New York and Jersey City	36,548	32,654	36,309
Oklahoma City		131	243
Milwaukee		6	****
		0	

-CHICAGO HIDE QUOTATIONS.

(Special Report to The National Provisioner from J. F. Nicolas.)

Chicago, March 3, 1923.—Quotations on hides at Chicago for the week ending March 3, 1923, with comparisons, are as

Spready native steers Heavy native steers Heavy Te xas steers Heavy Colorado steers St	ending 3, '23. @23c @20c @18c @18c	Weel Feb.	k ending 24, '23, @23e @20e @18e	131/2	7. week, 1922. (Q16e (Q15½e (Q15e
steers. Heavy native steers. Heavy Te xas steers. Heavy butt branded dsteers Heavy Colorado steers. Ex-Light Texas steers. Branded cows. He avy native cows Light native	@20e @18e @18e		@20e @18e @18e	15	@15½e @15e
Heavy native steers Heavy Texas steers Heavy butt branded steers Heavy Colorado steers Ex-Light Texas steers Branded cows Light native cows	@20e @18e @18e		@20e @18e @18e	15	@15½e @15e
steers	@18c		@18c @18c		@15e
Heavy Texas steers	@18c		@18c @18c		@15e
steers	@18c		@18c	14%	
brandedsteers Heavy Colorado steers Ex-Light Texas steers Eranded cows Heavy native cows Light native				-	
steers (Heavy Colorado steers (Ex-Light Texas steers (Branded cows (Heavy native cows (Light native (Light nat					@15c
Heavy Colorado steers 6 Ex-Light Texas steers Branded cows 6 Heavy native cows 1 Light native					@15c
steers (Ex-Light Texas steers (Ex-Light Texa	@17e				
Ex-Light Texas steers 6 Branded cows. 6 Heavy native cows 6 Light native	@17e				
steers 6 Branded cows			@17c		@14c
Branded cows Heavy native cows Light native	240.		040		
Heavy native cows	@13c		@13c		@12e
Light native	@13e		@13e	10%	@11e
Light native	21011		04011		
	@161/20		@16%6	14	@14 1/2 c
	2150		@15c	101	010
Native bulls 131/20	@ 14e	191/	@15C	12 1/2	@13e
Branded bulls 11 1/2	@14C	111	6 @ 12c		@10e
Calfskins18	01914	191	20120	17	@ 81/20
Kip17	@1714	17	@1714	975	@181/a
Slunks, regular.\$1.25	@1 40	\$1.2	5@1 40	81 %	001 30
Slunks, hairless.35	@75c	40	@85c	35	@70c
Light, Native, Bu	tts. C	'olorad	lo and	Texas	greere
1c per lb. less than			- 244		- vecta
CITY AN			DACKER	96	

Ic per lb. less than heavies		
CITY AND SMA	LL PACKER	S.
	Week ending Feb. 24, '23,	
Natives, all		
	14 @141/2c	
Bulls, native 12 @1212c	121/2@13e	6 @ 7c
Branded hides 12 @121/2c	12 @121/2c	7 @ 8c
Calfskins18 @18%c	18 @181/sc	16 @17e
Kip	17 @171/2e	15 @16c
Light calf\$1.30@1.35	\$1.20@1.30	\$1.25@1.30
Slunks, regular.\$1.00@1.10	\$1.00@1.10	\$1.00@1.10
Slunks, hairless.35 @70c	35 @70e	30 @60e
COUNTRY	HIDES.	

Week ending Mar. 3, '23.		Cor. week,
Heavy steers 13 @14c		816 @ 9c
Heavy cows121/2@13c		814 @ 9c
Buffs121/2@13c	121/2@13c	8 @ 81/4
Extremes 131/2@14c	131/2@14e	10 @11c
Bulls10 @101/20	e 10 @101/2c	
Branded10 @11c	10 @11e	@ 6160
Calfskins15 @16c		14 @15e
Kip	13 @14c	12 @13e
Light calf\$1.10@1.20	\$1.10@1.20	\$1.15@1.23
Deacons\$0.90@1.00	\$0.90@1.00	\$0.95@1.03
Siunks, regular. 50 @60c		60 @70e
Slunks, hairless.25 @30c	25 @30e	30 @35e
Horsehides\$4.50@5.00	\$4.50@5.00	\$3.00@4.00
Hogskins15 @20c		20 @25c
Pripag quoted are f o b	Chicago or Cl	licago freigh

Prices quoted are f. o. b. Chicago or Chicago freight equalized, for straight carloads or more to tanners. Dealers' price range ½@2c per lb. less.

ICE AND REFRIGERATION

ICE NOTES.

G. P. Little, Saluda, N. C., is contemplating the erection of a new ice plant.

Sawyer station, near San Rafael, Cal., will shortly erect a new cold storage plant.
The Taft Citizens Ice Co., Taft, Kern county, Cal., will soon build a new ice

The Chico Ice & Cold Storage Co., Chico, Cal., is going to erect a new plant very

The Tahlequah Ice Co., Tahlequah, Okla., has been incorporated with a capital of \$10,000.

Tulare Cattlemen's Association, Tulare county, Cal., is planning to erect some six plants.

The Poteau Ice Co., Muskogee, Okla., going to spend about \$20,000 in a new cold storage plant.

Stahl Bros., Gonzales, Tex., will begin construction of a new cold storage plant about March 15, 1923.

A large cold storage plant at Hayward, Cal., to cost about \$120,000 is being con-

sidered by E. L. Maccabee.

The Oklahoma Power Co., Okmulgee,

Okla., has bought the Home Ice Co. plant and will make extensive changes.

The Columbia Ice & Cold Storage Co., Fifth street, Wenatchee, Wash., is plan-

ning to make extensive improvements.

A. B. Hale will shortly erect a new cold storage plant at North Rome and Fuller streets, Tampa, Fla., to cost about \$50,000.

Hetler Bros. Ice Co., Inc., has bought a site at Emerson street and Norman ave-nue, Rochester, N. Y., and will erect a

The Springfield Ice & Refrigerating Co.,

Mill street, Springfield, Mo., will soon spend about \$75,000 on plant improvements.

A new ice and cold storage plant will be erected at Birmingham, Ala., by a new company organized with a capital of

The Central of Georgia Railway Co., Macon, Ga., is planning to erect a new ice and cold storage plant at Macon to cost about \$300,000.

LONDON CENTRAL STORAGE MARKET

Once again the rumor has been officially denied that any amalgamation is taking place in connection with the London Central Market Cold Storage Co. Ever since the Vestey interests took over the British and Argentine concern rumors have been afloat of a deal in which the name of the London Central Markets was mentioned. It may be taken for granted now that there is nothing at all in the amalgamation report.

The company is said to be in a strong financial condition, and the position was further helped by the announcement last June that the directors had decided to redeem the outstanding debentures. The sum thus affected was £27,850.

NEW MEAT CARRYING SHIP.

Recently the twin-screw steamer Port Hardy, constructed by Messrs R. & W. Hawthorn, Leslie & Co., Ltd., for the Commonwealth & Dominion Line, Ltd., London, ran a successful trial off the Tyne. The vessel is designed and constructed for Australian meet trade. The vessel of the trade of the t Australian meat trade. The vessel, of which a description has already appeared in Lloyd's list, has a deadweight carrying capacity of 11,300 tons.

REFRIGERATING SOCIETY MEET.

The tenth western meeting of the American Society of Refrigerating Engineers will be held in St. Louis, Mo., on Monday, Tuesday and Wednesday, April 30 and May 1 and 2, 1923. The prime aim of this society, according to the constitution, is "to promote the arts and sciences con-nected with refrigerating engineering."

STEVENSON'S Regular Doors

leaders for 26 yearsthe quickest, easiest, tightest Regular door in existence. Imitated, but never equalled.

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Stevenson Cold Storage Door Co. Chester Penna.

Cold Storage Insulation All Kinds of Refrigerator Construction

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Freezer and Cooler Rooms for the Meat and Provision Trade

Specialists in CORK INSULATION Details and Specialists on request 207 East 43rd St. MOTTOW Insulating Co., Inc. NEW YORK





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SAFE - SIMPLE - ECONOMICAL

Economical Refrigeration can only result from a properly proportioned plant, made up of machinery designed and built cor-

rectly. We offer you the benefit of our long experience-and we guarantee our product. Frick machines have proven safe investments and are paying good dividends everywhere. It will pay you to investigate.





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Your plant conditions demand either the Absorption or Compression type of refrigerating equipment. Let us aid you with our experience in selecting the machine which fits your requirements, assuring you the most efficient and economical service.

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Refrigerating Equipment Absorption—Compression

HENRY VOGT MACHINE CO. Louisville, Ky.

MANUFACTURERS OF ICE AND REFRIGERATING EQUIPMENT—DROP FORGED STEEL VALVES AND FITTINGS
—WATER TUBE AND HORIZONTAL RETURN TUBULAR BOILERS—OIL REFINERY EQUIPMENT.



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Bldg.
Boston—G. W. Goerner, 40 Central St.
Buffalo—Central Supply Co.; Keystone Warehouse Co.
Cleveland—Curtis Bros. Transfer Co.
Detroit—Brennan Truck Co.
El Paso—R. E. Huthsteiner, 615 Mills Bldg.
Jacksonville—Jacksonville Warehouse & Distributing Co.

Los Angeles—Mailliard & Schmiedell, Mexico, D. F.-F. Bezaury, Jr., 7 a de Colima 225 B.

New York—Roessler & Hasslacher Chemical Co., 709 6th Ave. Newark—American Oil & Supply Co. New Orleans—O. E. Lewis & Co., Inc., 638 Camp St. Norfolk—Southgate Forwarding & Storage Co. Philadelphia—Henry Bower Chemical Mfg. Co.

Pittsburgh—Pennsylvania Transfer Ca: Pennsylvania Brewers Supply Co., 158 16th

Pennsylvania Brewers Supply Control St.

St.
Richmond—Bowman Transfer & Storage Co.
Rochester—Rochester Warehouse & Distributing Co., 1 Mt. Hope St.
Savannah—Savannah Brokerage Co.
San Francisco—Mailliard & Schmiedell.
Seattle—Mailliard & Schmiedell.
Toledo—Moreton Truck Co.; G. H. Weddle & Co., 1932 Canton St.
Washington—Littlefield, Alvord & Co.

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THE ARMOUR-MORRIS MERGER.

(Continued from page 21.)
Title II of the Packers and Stockyards

Act.
The complaint outlines the two companies as follows:

The Armour Organization.

The Armour Organization.

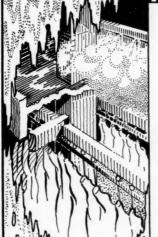
Armour & Company of Illinois is a packer subject to the jurisdiction of the Packers and Stockyards Act and was organized as a corporation under the laws of Illinois on April 7, 1900. It has an authorized capital stock of \$400,000,000, of which there is outstanding \$60,000,000 of preferred stock and \$100,000,000 of common stock. In addition there are outstanding gold bonds, notes and debentures amounting approximately to \$115,000,000. This company is the second largest meat packer in the United States and operates sixteen large packing plants, together with 332 branch houses, in the principal cities and states.

At the time of its creation in 1900, Ar-

At the time of its creation in 1900, Armour & Company had outstanding capital stock of \$20,000,000 and a surplus of approximately \$13,000,000, and has since atproximately \$13,000,000, and has since attained its present greatly enhanced size and dominating influence, not solely by natural business development, but largely by purchase and otherwise of the ownership or control of numerous other concerns in the meat packing and related lines of business scattered over the country.

Armour & Company of Delaware was organized in the latter part of 1922 to operate as a subsidiary of the Illinois corporation in the meat packing and related lines of business. It is authorized to issue \$100,000,000 of preferred stock, \$60,000,000 of company stock and \$50,000. \$60,000,000 of common stock, and \$50,000,000 of first mortgage bonds, and all of its common stock is to be or has become the property of the Illinois corporation. About \$110,000,000 of the proceeds of its bonds

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Beef is perfectly chilled to the bone in 36 hrs., with brine at 28 to 31° F. Carcasses take a superior bloom and set and rib out without slipping of flanks. Hogs chilled dry and firm ready to cut in 20 hrs., with brine at 22 to 25° F. Coolers down to 29° F. next morning, permitting a round trip every day.

Vigorous air circulation is the answer

Webster Sprays as we apply them produce the results. We use no fans or complex equipment—simplicity is a feature. Complete brine spray systems installed for every service.

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INVESTIGATE THE IS YEARS GOOD RECORD MANUFACTURED APPLIED AND GUARANTEED BY

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CHATILLON THERMOSEAL PROVISION SCALE



One of the most perfect scales ever built for packinghouse use. Mounted on wheels, for convenience in handling. Equipped with a galvanized, square pan, the sides of which let down if quarters or large pieces are to be weighed. Special feature of importance is the automatic, foolproof, thermostatic device that corrects the scale for variations due to changes in temperature.

Write for complete information concerning these Thermoseal Scales.

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CUTTER AND MIXER

For Meat and Vegetable Products

Does everything the silent cutter and the meat mixer can do, and does it better.

Twin-Screw Super Mixer

For Pastes, Powders, Liquids

Does better work in less time and at lower cost than any other mixing equipment.

Rotary Beef Scrap Roaster

Turns all Abattoir Offal into high-grade Tallow, Grease and Crackling instead of low priced tankage. Abolishes the nuisances of the packing business. Does away with digester or pressure cooking tanks, tankage presses, evaporators, fertilizer dryers.

Turn Your By-Products Into Big Profits With "America's Famous Crusher"



by crushing your Beef Scraps, Tankage, Dry Bones, Green Bones, Junk Bones, etc. Gruendler Ball Bearing Crushers are reducing overhead expense at such plants as Armour & Co., Swift & Co., Wilson & Co., and many others throughout the world.

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Gruendler Crushers are built in any size to meet your particular requirements
Write today for further information.

Gruendler Patent Crusher and Pulverizer Company, 932 N. Main Street, St. Louis, Mo.

The United States Can Company

Lithographed Lard Pails and Cans

2510 Highland Avenue, Norwood Station Cincinnati, Ohio and preferred stock either have been or are to be received by the Illinois corporation for the retirement of certain of its outstanding obligations and for its other corporate purposes.

Morris & Company's Business.

Morris & Company is a Maine corporation, organized October 16, 1903, and has an authorized and outstanding capital stock of \$40,000,000 and in addition outstanding gold bonds and notes of approximately \$32,000,000. It is also a packer subject to the Packers and Stockyards Act and is the third largest meat packer in the United States. It operates seven large packinghouses and 164 branch houses in various cities and states. Many of these packing plants and branch houses are located in cities and states where Armour & Company also operates.

Recated in cities and states where Armour & Company also operates.

Both companies have slaughtering plants in Chicago, Kansas City, East St. Louis, Omaha, South St. Joseph, and New York, at which markets during the four years ending June 30, 1922, were slaughtered 48.3 per cent of all animals slaughtered under federal inspection. At National Stockyards, Illinois, the two companies together slaughtered 62.9 per cent of the cattle, 65.3 per cent of the calves, 67.3 per cent of the sheep, and 54.4 per cent of the hogs; at South St. Joseph, 56.5 per cent of the cattle, 61.6 per cent of the calves, and 52.6 per cent of the calves; and at Kansas City, 52.6 per cent of the hogs slaughtered under federal inspection at these markets.

Statement of Secretary Wallace.

The statement of Secretary Wallace concerning the complaint issued against Armour & Company with reference to their acquisition of the properties of Morris & Company is as follows:

On November 15, 1922, Mr. J. Ogden Armour, Mr. F. Edson White and Mr. Charles J. Faulkner, the latter attorney for Armour & Company, came to the Department of Agriculture and told me they had been making plans to buy the physical assets of Morris & Company, and wished my endorsement, or, failing that, my acquiescence

acquiescence.

On November 27, at a conference between the President, the Attorney General, and myself, it was agreed that there was no obligation upon either of us to endorse or acquiesce in the action proposed, or to express in advance an opinion concerning it, and that none of us would or could be expected to approve in ad-

or could be expected to approve in advance of such a transaction.

On Wednesday, November 29, Mr. Armour called me on long distance from Chicago to inquire about my attitude with regard to the matter. I told him that our investigations had not been completed, but from results so far my decision probably would be unfavorable to the proposed purchase.

Opposed Proposed Merger.

Early in December I told Mr. Armour and Mr. White that I did not think we could look with favor upon the transaction proposed, and suggested that they should do nothing further with it. They said that they felt it was very necessary that they should complete this purchase in order that they might increase their volume of business and thus better be able to meet their heavy overhead charges. Like most of the packers, they had spread out during the war to handle the heavily increased receipts of livestock, and now that their receipts had decreased it was very necessary that they do something to enlarge their own volume of husiness.

their heavy overhead charges. Like most of the packers, they had spread out during the war to handle the heavily increased receipts of livestock, and now that their receipts had decreased it was very necessary that they do something to enlarge their own volume of business.

On Monday, December 11, I repeated to Mr. White and Mr. Faulkner what I had said to Mr. Armour and Mr. White the previous week, namely, that the best thing to do was to drop the whole matter, and before the conversation ended I told them plainly that if they should go ahead and consummate the purchase I should feel it

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duty to issue a complaint, which very my duty to issue a complaint, which very likely would be followed by an order to cease and desist, in order that a judicial decision might be obtained.

decision might be obtained.

Following this conversation the matter rested until statements appeared in the papers concerning the reorganization of Armour & Company by the formation of the Delaware company. Our information did not indicate that it included the plan to buy Morris & Company. In fact, I think a statement was made by Armour & Company to the effect that this was a refinancing operation—made necessary by the ing operation - made necessary by the changed conditions in the packing business, and was not connected with the proposed Morris purchase.

To Start Formal Proceedings.

On January 29 I heard that some sort of an agreement had been signed by J. Ogden Armour and by the stockholders of Morris & Company. I called Armour & Company at Chicago and asked whether such an agreement had been signed, and was told that it had been but that its was told that it had been but that its terms had not yet been put into effect. I told representatives of Armour & Company and Morris & Company that formal proceedings would be instituted, as I had previously stated to them, and our attorneys at once began to prepare the compaint which has now been issued. plaint which has now been issued.

plaint which has now been issued.

Whether the proposed purchase of Morris & Company is in violation of the law is a matter for final determination. It may be argued that by combining the business of Armour and Morris the enlarged concern will be in a position to compete more vigorously because of economies effected. On the other hand, the refinancing involved may also place an additional burden on the industry. Above all, there is a vital principle involved which cannot be ignored. It will eliminate one of the five largest packers in the United States and, in my opinion, it may result in materially lessening competition among the buyers of livestock at the among the buyers of livestock at the various markets.

This is one of the things which the Packers and Stockyards Act was intended to prevent. It must be remembered that competition in the buying of livestock by the packers is different in its character from competition in buying raw material by the ordinary ranufacturing plant. Each by the ordinary manufacturing plant. Each day's transactions are practically com-plete. The livestock is placed in the pens in the stockyards. The buyers of the various packers and other buyers who ship the stock further east go into the yards in the morning and compete with one

Take the Chicago market as an example. Four of the so-called "big five" packers do business in this market. Dealing only with inspected slaughter at Chicago, the records show that as an average of recent years Armour & Company has bought 20.1 per cent of the cattle, 32.2 per cent of the calves, 20.5 per cent of the hogs, and 30.6 per cent of the sheep. Morris & Company has bought 16.1 per cent of the cattle, 22 per cent of the calves, 9.2 per cent of the hogs, and 16.5 per cent of the sheep. Assuming that, by the purchase of Morris & Company Armour, would be able to buy as records show that as an average of recent Company, Armour would be able to buy as large a percentage of the livestock as Morris & Company heretofore bought and at the same time keep up their own norat the same time keep up their own normal percentage, it would result in Armour & Company buying 36.2 per cent of the cattle, 55.2 per cent of the calves, 29.7 per cent of the hogs, and 47.1 per cent of the sheep.

Says Would Hurt Competition.

It will be seen from this that Armour's influence in the market, through the purchase of Morris & Company, would be increased by 54 per cent. At the St. Joseph market the enlarged Armour company would handle 56.5 per cent of the cattle, 61.6 per cent of the cattle, 61.6 per cent of the catves, 52.6 per cent of the hogs, and 26.4 per cent of the sheep, doubling the present influence of Armour on the basis of the inspected slaughter at that market.

The livestock market is very sensitive. By the simple act of refraining from send-By the simple act of refraining from sending their buyers into the yards promptly on time of any morning of heavy runs, either of the larger packers can very materially depress the market. Any act, therefore, which materially increases the buying percentage of either of the larger packers puts it in his power to substantially lessen competition and depress prices. Producers of livestock need all the competition that now exists.

If this combination should be upheld the company would still be under the Packers and Stockyards Act, but it should be remembered that under this act, if one of the large packers wishes to stay out of the market, I can do nothing to prevent that, unless it can be shown to be for an unlawful purpose or with unlawful effect. Neither

ful purpose or with unlawful effect. Neither do I have any authority to limit the margins taken for operation.

Our authority covers trade practices and acts which restrict competition or tend toward monopoly. We have broad powers of inquiry to enable us to inform ourselves regarding the business. If government supervision were adequate to regulate the relation between the prices paid for the relation between the prices paid for the livestock and the prices at which the meat and other products should be sold, and see to it that nothing more than a fair and just profit is exacted, it is quite conceivable that by allowing the packers to combine in a large way great economies could be effected and the result might be helpful hoth to producers and consumers. ful both to producers and consumers. At the present time, however, there is no such authority given to any government agency.

LARD AND HOG STATISTICS.

(Continued from page 25.)

oil producers. Europe being left in absolute control of oriental oils practically dictates the price for them and keeps it low. Consequently it means a low oleomargarine price in Europe in competition with which our American lard has to be sold. Oleomargarine and hog lard in Europe are practically interchangeable in their use just as in this country compound lard and hog lard are equally interchange-

The decrease in our lard exports means that so much more lard has to be sold in this country and the result has been that there has been thrown on the domestic markets and thus consumed in this counmarkets and thus consumed in this country during the year of 1922, 779,110,843 lbs. of hog lard as against the previous year's figure of 549,482,566 lbs. In other words there has been thrown on the domestic markets about 43 per cent more lard to be consumed during 1922 as against the figure for 1921

the figure for 1921.

On account of the two short crops of cotton we have not felt this tremendous increase in lard being thrown on the domestic markets as much as ordinarily would be the case, but in an ordinary crop would be the case, but in an ordinary cropyear it is a matter that in future we will have to reckon with considerably. It is a new feature brought about by the tariff and coming on top of the loss of our cotton oil export trade is one that we have to watch very closely in coming years. Undoubtedly it will necessitate our forcing a proportionate amount of cotton oil into

low grade channels such as the soap making channels.

ST. PAUL.

(Reported by U. S. Bureau of Agricultura) Economics and Minn. Dep't of Agriculture.) South St. Paul, Minn., February 28.

Although cattle marketings for the week have been fairly liberal, demand has been fully equal to the supply and prices on killing classes compared with a week ago

show very little change, if any.

Fat beeves of good and choice grade are entirely lacking in current marketings. Best fat beeves here this week sold in part loads at \$8.25 and \$8.50 with \$8.00 the practical top for the trade in fat steers and warrings. Bulk of fat steers and and yearlings. Bulk of fat steers and yearlings of common and medium grades

yearlings of common and medium grades are moving at present between the price limits of \$7.00 to \$8.00, with commonest kinds going at \$6.00 to \$6.75.

Best fat heifers sold all week from \$6.50 to around \$7.50 with the bulk \$5.00 to \$6.25. Best fat cows went at \$5.50 to around \$6.50, with the bulk \$4.00 to \$5.25.

Canners and cutters sold largely at \$2.75 to \$3.50 within a quotable price range of

to \$3.50 within a quotable price range of \$2.75 to \$3.75. Price limits for bologna bulls remained at \$3.75 to \$4.75 with bulk of the medium and heavyweights \$4.25 to \$4.50.

The market for veal calves has slumped badly during the past week and best lights selling today largely at \$9.00 to \$8.25 show losses of better than \$1.00, compared with last Wednesday. Seconds brought \$4.50 to \$5.50 today with the average cost somewhat under \$5.00.

February receipts of hogs were liberal, totaling about 280,000, or an increase of around 65,000 compared with February, 1922. Receipts for the first three days this week aggregated 55,000 against 49,500 the same period a week ago and 27,500 the corresponding days a year ago. Butcher and bacon hogs are 10 to 15c lower than a week ago, bulk cashing today at \$7.60 to \$7.90, with a few light sorts at \$8.00 to \$8.10, while bulk of packing sows cashing at \$6.25 are 25c lower for the period. Pigs sold at \$8.00 today compared with \$8.10 last Wednesday.

The sheep market is charting a fairly stable course, good to choice fed lambs cashing at present from \$14.25 to \$14.40, with a top of \$14.60 on Monday. Fat lambs averaging upwards \$10.50 to \$12.50 according February receipts of hogs were liberal,

averaging upwards from 90 lbs. are cashing from around \$10.50 to \$13.50 according to weight and quality, with culls and com-mon lambs largely at \$10.00 to \$12.00. A handful of choice light ewes with good to choice 100 to 130-lb. ewes going at \$7.50 to \$7.75; 150 to around 200-lb. ewes \$5.50

SIOUX CITY LIVESTOCK.

(Continued from page 44.)

@7.85 deal, with \$7.90 a top, and bulk of the crop sold at \$7.80@7.85. There still seem to be plenty of hogs in this territory—and a record pig crop soon to farrow

There is very little doing in sheep at this market. Farmers have marketed most of their winter feeding and the big feeding sections of the West do not hit

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Chicago Section

Fred Begg, secretary of Powers, Begg & Co., Jacksonville, Ill., was in Chicago this week.

John L. Yocum, manager for Swift & Company at Seattle, Wash., was in Chicago this week.

Fred T. Fuller, president of the Iowa Packing Co., Des Moines, Ia., was a visitor in Chicago during the last few days.

P. A. Jacobsen, president of the Interstate Packing Co., Winona, Minn., was a visitor in Chicago during the past week.

Ben. Barrows, manager of the byproducts department of the Jacob Dold Packing Co., Buffalo, N. Y., was in Chicago last week.

Packers' purchases of livestock at Chicago for the first four days of this week totaled 34,927 cattle, 14,471 calves, 100,925 hogs, and 21,408 sheep.

Louis F. Swift is reported as having sailed from San Francisco last week on the steamer Shinyo Maru for a journey of rest and recreation to the Orient.

Swift & Company's sales of carcass beef in Chicago for the week ending Saturday, February 24, 1923, for shipment sold out, ranged from 7.50 to 18.00 cents per pound, averaged 12.08 cents per pound.

Provision shipments from Chicago for the week ending February 24, 1923, with comparisons, were as follows:

Cured meats, lbs. .11,762,000 11,907,000 11,328,000 Lard, lbs. .10,465,000 9,436,000 6,794,000 Fresh meats, lbs. .22,140,000 21,208,000 24,389,000 Pork, bbls 5,000 4,000 5,000 5,000 5,000

Members of the Swift Glee Club are tuning up for their annual concert at Orchestra Hall on April 11. This is one of the finest singing organizations in Chicago. Their solois: this year will be

Coorgo F. Pine Walter L. Munnocke
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Emclency. 206-7 Falls Bidg., MEMPHIS, TENN. Edward Johnson, the famous tenor star of the Metropolitan Opera Company, New York.

Charles M. Macfarlane, vice-president and treasurer of Morris & Company, will become vice-president, a director and treasurer of Wilson & Company. Mr. Macfarlane, like Thomas E. Wilson, grew up in the Morris organization, and it was not entirely a surprise when the announcement was made this week that the two



CHARLES M. MACFARLANE.
Vice President and Treasurer, Wilson & C

would get together again. Both began as young men in the stockyards; one is now head of one of the "big five" packing organizations, and the other a leader in banking and financial circles. Mr. Macfarlane began as a bookkeeper in 1891 and rose to auditor, chief accountant, secretary, treasurer and vice-president. His assumption of the treasurer's duties at Wilson & Company will enable Mr. Wm. C. Buethe to give more of his personal attention to the extensive and growing foreign interests of Wilson & Company.

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Edward S. Waterbury, for many years head of the provision department of Morris & Company and later executive assistant to the president, has been made vice-president and general manager of Gunn's, Ltd., Toronto, one of the leading meat packing concerns of Canada. Mr. Waterbury has already gone to Toronto to assume his duties.

Peter H. Lindstrom, for 28 years head of the hotel supply department of Morris & Company, will shortly establish himself in the hotel and restaurant supply business in Chicago under the title of Peter H. Lindstrom & Co., Inc. "Pete" Lindstrom is one of the most conspicuous (on account of his size) and popular men in the meat trade in Chicago, and his friends will be interested to know of his plans.

A. W. McLaren, head of the traffic department of Morris & Company, will become vice-president of the Chicago Malleable Casting Co., one of the leading concerns in its field. Mr. McLaren will be in charge of the sales of the company. He has been at the head of the Morris traffic department since 1910, coming to the packing field from the New York Central Railroad, where he was assistant to the vice-president in charge of traffic.

CHICAGO MEAT TRADE CONDITIONS.

The weekly review of meat trade conditions at Chicago by the United States Bureau of Agricultural Economics is as follows:

With supplies of fresh meat liberal and demand generally slow, prices on all meat took a downward course. Buyers were bearish and considerable unevenness was noticeable in lamb and pork prices early in the week and continued throughout with strong efforts on behalf of salesmen to clean up holdings at the week-end.

Liberal offerings of steer beef consisted largely of common and medium grade, with the bulk selling from \$11.00 to \$14.00, such kinds showing a decline of \$1.00 from a week ago. Good steers, mostly of the yearling type, of which the supply was comparatively light, held steady with a

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15 Park Row New York

References

Armour & Company
The Cudahy Packing
Co.
Austin Nichols &
Co.
New York Butchers
Dressed Meat Co.

Joseph Stern & Sone, Inc.

Manhattan Veal & Mutton Co.

United Dressed Beef Co. of Mr.

elf

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nd ere rly en week ago at \$15.00 to \$16.00, while prices on the light offerings of choice bullocks weakened around 50 cents from a week ago. Steer lots included a fair percentage of heifers. She stock offerings consisted largely of medium and good butcher cows, with a normal supply of canners and cutters, and light offerings of common butcher cows. Common cows held steady, while better grades declined 50 cents from a week ago. Rounds and chucks moved fair better grades declined 50 cents from a week ago. Rounds and chucks moved fairly well, while loins and ribs were more or less draggy with prices uneven. Under a slow demand bologna bull prices declined 25 cents for the week. While Kosher beef prices in general show no change from a great seg, there is a noticeable weakness. week ago, there is a noticeable weakness within the price range, with demand some-

With the attractive high prices on veal last week, receipts were much heavier this week, and prices on all grades were forced downward from \$1.00 to \$2.00. General quality was fair, with choice calves in the minority.

The liberal supply of lambs proved excessive for the generally slow demand and prices showed considerable unevenness prices showed considerable unevenness early in the week. Light lambs showing some quality were in best demand and held steady to strong with a week ago, while heavy lambs especially of medium and common quality sold very unevenly at mostly \$1.00 under last week's closing

While mutton supplies were only moderate, demand was limited and prices show declines of \$1.00 to \$2.00 from a week ago.

week ago.
With supplies of pork liberal and demand uneven and bearish, considerable fluctuations in prices prevailed throughout the week with many low sales recorded. With supplies diminishing a slightly better feeling prevailed towards week end, with prices on a little more

the week end, with prices on a little more stable basis.

Compared with last Friday, steers 50 cents to \$1.00 lower, cows steady to 50 cents lower, bulls 25 cents lower, veal mostly \$2.00 lower, lambs steady to \$1.00 lower, mutton \$1.00 to \$2.00 lower, pork loins steady to \$1.00 lower, shoulders unchanged, picnics and Boston butts 50 cents lower and spareribs \$1.00 lower. There will be a light to moderate carryover of all kinds of meat.

CHICAGO STOCKS OF PROVISIONS.

Stocks of provisions in Chicago at the close of business on February 28, 1923, with comparisons, were as follows:

	Feb. 28, 1923.	Jan. 31, 1923,	Feb. 28, 1922.
Mess pork, new, made			
since Oct. 1, 1922.			
bbls.	1.052	2,309	770
ther kinds of bar-	-,	_,_,	
reled pork, bbls	21.894	20.144	23,190
. S. lard, made			
since Oct. 1, 1922.			
lbs	7.396,011	4.461.892	16.002,647
mer kinds of lard	3,832,700	3,728,305	4,340,430
short rib middles,			
made since Oct. 1,			
1922, lbs	1,659,250	955,933	142.071
mort rib middles.			
made previous to			
Oct. 1, 1922, lbs			98,416
bort clear middles,			
lbs	287,513	83,800	160,058
axtra short clear			
middles, made since			
Oct. 1, 1922, lbs	724,715	511,784	583,165
xtra short rib mid-			
dles, lbs.	86,461	48,748	255,788
backs, lbs	5,562,050	4,960,779	5,490,734
ory salted shoulders.			
lbs.	236,579	320,092	332,409
bry salted bellies,			
lbs.	15,970,678	13,672,731	18,243,049
weet pickled hams.			
lbs.	31,020,290	27,515,188	21,568,946
weet pickled skin-	00 800 004		
ned hams, lbs	26,523,691	24,118,764	8,798,08
weet pickled bellies,	** *** ***	0.000.000	
lbs Sweet pickled Cali-	11.676,494	9,005,952	7,139,983
fornia or picnic hams; sweet pickled			
Boston shoulders,			
lbe shoulders,	0.050.544	F 074 100	F 007 01
Sweet pickled shoul-	9,500,741	7,974,408	0,931,21
ders, lbs.	101 075	143,015	107 446
Other cuts of meats,	191,949	140,010	105,448
lbs ments,	10 057 955	19 970 909	6,492,033
		12,010,292	0,492,03
Total cut meats,			
lbs	114 759 609	109 191 198	75 947 900
	117,100,002	102,101,480	10,021,030

CHICAGO LI	VEST	OCK.	
RECEIL	PTS.		
Monday, Feb. 19. 20,800 Tuesday, Feb. 20. 12,466 Wednesday, Feb. 21. 8,414 Thursday, Feb. 22. 9,440 Friday, Feb. 23. 4,356 Saturday, Feb. 24. 500 Total for week 55,976 Previous week 55,976 Year ago 55,997	Calves. 2,679, 4,347 1,726 4,899 1,747 200 15,598 10,242 12,723	Hogs. 65,062 42,588 22,483 42,912 50,753 15,000 238,798 196,433 168,945	Sheep. 19,191 18,188 15,651 13,498 8,775 2,000 77,283 75,766 75,901
Two years ago48,417	12,869	167,293	83,961
SHIPME	NTS.		
Monday, Feb. 19 5,500 Tuesday, Feb. 20 3,816 Wednesday, Feb. 21. 4,440 Thursday, Feb. 22 3,286 Friday, Feb. 23 2,119 Saturday, Feb. 24 400	432 392 403 388 115	17,407 14,763 8,901 8,954 14,759 5,000	5,542 3,638 5,187 6,729 3,205 300
Total for week	1,765 1,083 1,193 1,641	69,784 62,215 45,574 47,566	$\begin{array}{c} 24,601 \\ 25,268 \\ 26,755 \\ 20,779 \end{array}$
Receipts at Chicago for t 1923, with comparisons, were			
	1923	Year-	1922.

Calves												٠														10	5	,7	87	ī							62
Hogs					ì							ı					ı								1.	.75	5	8	00)			1				66
Sheep																										59	4	,4	08	5					05	,5	51
Com																										po	i	at	8	f	or	t	h	е	V	ve	ek
ending		1	ř	el)	rı	11	a	r	y		2	4	,		1	9	2	8	1,		1	vi	it	h	e	01	m	Beq	ri	801	ns	:				
																				•	C	8	ti	tl	e.				H	og	s.			1	Sh	ee	p.
Week	4	ei	ne	d	iı	11	œ		I	1	el	٥.		1	2	4				1	8	Ö.	.(H	00			7	02	2,0	00			2	09	,0	00
Previo				1	v	e	e	k	ſ											1	8	4	.(H	00	•					00						00
1922									ì											1	7	2	.(H	00)					00						00
1921				٠																1	4	8	.(H	M	,					000						00
1920		í																		1	7	9	,(H	00	1					00						00
1010																				1	a	Q	4	M	M	1		7	151	16	nn			1	77	6	00

Cor	nbined receipts at seven	points to Fe	bruary 24,
1923,	with comparisons:		
	Cattle.	Hogs.	Sheep.
1923	1,487,000	5,283,000	1,606,000
1922		4,202,000	1,540,000
1921		4,736,000	1,752,000
1920		4.844.000	1,615,000

*Calves at Omaha, St. Louis and St. Joseph counted as cattle.

Prices of hogs at Chicago for week ending February 24, 1923, with comparisons, are as follows:

Average, 1913-22 171,100 225 \$12.05 \$11.45 *Receipts and average weight for week ending February 24, 1923, unofficial.

Chicago February					1	10) g		1	sl	a	u	g	h	ŧ	91	r		f	0	r		V	V	Be	1	K		ending This
Armour &	Co																												week. 24.000
Anglo-Am																													
Swift &																													
Hammond																													7.400
Morris &																													
Wilson &																													
Boyd-Luni																													
Western																													
Roberts &	. 0	ako	•	-	0.			۰	•					٠	۰	•		•				•		۰	:		•	۰	
Miller &																													
Independe																													
Brennan	Caci	Kittle	5	U	U.				٠					*	*	٠	*			•				*		*			
William																													
Agar Pac	Kinj	3 0	0.				*	*						*	٠	٠	+	٨	*								٠	*	2,900
Others					٠										٠	٠	٠	٠											21,500
Total .																													
Previous	Wee	k .																											136,000
Year ago																													
Two year																													
Three yes	rs	820													•	ì													110,500
WEEK																													

11	EEKL	Y AVEF	RAGE	PRICE	E OF L	IVESTO	CK.	
				attle.	Hogs.		Lambs.	
Weel	c endir	ig Feb.	248	8.75	\$ 8.00	\$ 7.65	\$13.85	
Prev	ious w	eek		8.85	8.05	7.65	13.90	
Cor.	week,	1922		7.80	10,35	8.30	15.40	
Cor.	week.	1921		8.75	9,50	6.00	10.00	
Cor.	week.	1920		12.55	14.30	13.55	19.70	
Cor.	week.	1919		16.00	17.52	12.50	18,25	
Cor.	week.	1918		12.40	16,85	12,35	16.60	
OF.	week.	1917		10.55	13.35	11.50	14.00	
Cor.	week.				8.85	7.90	11.00	
Cor.	week.	1915			6.70	7.40	9.50	
Cor.	week.				8.60	5.85	7.55	
Cor.	week.	1913			8.63	6.40	8,65	

Average, 1913-22\$10.15 \$11.45 \$ 9.15 \$13.05 Prices at Chicago, Thursday, March 1, 1923:

CATTLE.	
Beef Steers: Med, and heavy wt, (1,100 lbs, up)— Choice and prime	10.15@11.00 9.65@10.15 8.35@ 9.65 6.65@ 8.35 10.15@11.00 9.65@10.15 8.25@ 9.65
Common	6.40@ 8.25
Butcher Cattle: Heifers, common choice. Cows, common choice. Bulls, Bologna and beef.	5.25@ 9.65 4.25@ 7.50 4.50@ 6.75
Canners and Cutters: Cows and heifers	3.15@ 4.25 3.75@ 5.00
Light and med. weight, med. good and choice Heavy weight, common choice	7.25@11.25 3.50@ 8.00
HOGS.	

Тор	8.35	
Bulk of sales		
Heavy weight (250 lbs, up), med, choice	7.90@	
Med. weight (200-250 lbs.), med, choice	8.05@	8.25
Light weight (150-200 lbs.), com, choice	8.15@	
Light lights (130-150 lbs.), com. choice	8.00@	
Packing sows (250 lbs, up), smooth	7.10@	7.45
Packing sows (200 lbs, up), rough	6.75@	7.15
Killing pigs (130 lbs. down), med, choice	7.00@	8.00
0.10		

		6	SELES!	EL.		
Lambs (85	lbs. d	lown).	med	ium	prime	13.50@15.25
Culls and	comme	on				10.00@13.50
Yearling						
Wethers.						7.50@10.75
Ewes, me	dium c	hoice				6.50@8.65
Culls and	comm	on				3.75@ 6.75
Fooding le	mhs 1	nodinm	oh	nice		13.50@15.25

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Chicago Provision Markets

					0	
		(PRICES		
Based	on	Actual	Carlot 1,	Trading, 1923.	Thursday,	March
				Meats.		
Regula	. H	ams-	u. 0011	meato.		
8-10	lb					@171/2
10-12 12-14	lb lb					@16 @151/4
14-16	1b	s. avg.				@151/4
16-18 18-20	lb lb	s over				@151/4
#kinned	100	s. avg.				@15%
14-16	16	s. avg.		********		@16%
16-18 18-20	16	s. avg.				@ 1656
20-22	lb lb	s. avg.				@16%
22-24 24-26	lb lb	s. avg.				@1414
25-30	lb	s. avg.				@121/2
Picnics-	-					
4- 6 6- 8	lb		3	********	******	@ 914 @ 834
8-10	lb lb	s. avg.	*******			@ 81/4
10-12	lb	s. avg.		*******		@ 81/8
Clear E						
6- 8 8-10	lb	S. AVE.				@1915 @1634
10-12	lb	s. avg.				@141/2
12-14 14-16	lb	s, avg.				@13½ @13
	440			Meats.		610
Regular	н	ams—				
8-10	lb					@161/2
10-12 12-14	lb	s. avg.				@151/2
14-16	lb	s. avg.				601416
16-18 18-20	lb	s. avg.				@14%
Skinned		ams—				W13
14-16	1h	a. ave.		*		@16%
16-18 18-20	Ib	R. AVE.				@16¼ @15¾
20-22	lb	s. avg.				@141/2
22-24	lb	s. avg.				@131/2
24-26 25-30	lb	s. avg.				@13 @12%
Picnics-	-					
4- 6 6- 8	lb lb					@ 91/4
8-10	lb	s. avg. s. avg.				@ 814
10-12	lb	s. avg.				@ 81/8
Clear E	lb					@17
8-10	The	AVE.				@17 @15
10-12 12-14	1b	L RVE.				@14
14-16	lb	avg.				@13 1/2
		-		t Meate		
Extra	ribs					@10%
Extra	clea	rs				@10%
Clear	plat	s			******	@ 81/2
Jowl b	utts					@ 7%
Fat Ba 8-10						@ O
10-12	lb:	s. avg.			******	@ 9
12-14 14-16	Ib	s. avg.				@ 9%
16-18	lb	s. avg.				@101/4
18-20 20-25	lb	s. nvg.				@10%
Clear E						W11/2
12-14	lb	s. avg.				@12%
14-16 18-20	lb	S. AVE.				@121/2
20-25	lb lb	s. avg.				@12
25-30 20-35	lb	s. avg.				@11% @11%
50.35	10)	s. avg.		•—	******	W1178
				*		

FUTURE PRICES.

Official Board of Trade Range of Prices.
SATURDAY, FEBRUARY 24, 1923.
Open. High. Low. Close.

LARD-(Per 100 lbs.)-			
March 11.50	11.521/2	11.471/2	11.471/2
May 1 11.55	11.60	11.50	11.50
July 11.70	11.70	11.621/2	11.65
RIBS(Boxed, 25c more th	an loose	-	
May 10.821/2	10.821/2	10,771/2	10.77 1/2
July 10.90	10.921/2	10.90	10.90
MONDAY, FEBR	UARY 26	, 1923.	
Open.	High.	Low.	Close.
LARD-(Per 100 lbs.)-			
March 11.45	11.45	11.35	11.371/2
May 11.521/2		11.42 1/2	11.45
July 11.621/2	11.621/2	11.55	11.57 1/2

RIBS-(Boxed, 25c more than	an loose)		
Man (Doxed, 200 more the	an loose)	-	20.721/9
May 10.87½	40 084/	40 07	
July 10.87 1/2	10.87 1/2	10.85	10.85
TUESDAY, FEBR	TARV 9	7 1023	
			C11
Open.	High.	Low.	Close.
LARD-(Per 100 lbs.)-			
March 11.50 May 11.50	11.50	11.50	11.50
May 11.50	11.60	11.50	11.57 1/2
July 11.67½	11.70	11.67 1/2	11.70
RIBS-(Boxed, 25c more th	an loose)—	
May		A	10.75
July 10.95	10.95	10.87%	10.90
The state of the s			
WEDNESDAY, FEB	RUARY	28, 1923	
LARD(Per 100 lbs.)			
March	High.	Low.	Close,
March 11.55	11.55	11.50	11.50
May 11 65	11.65	11.60	11.60
July 11.75	11.75	11.70	
RIBS-(Boxed 25c more the	n loose)	11.10	44.1272
May 10.75	10.75	10.70	10.70
July 10.821/2			10.821/4
July 10.82 72	10.81 72	10.02 79	10.04 72
THURSDAY, MA	RCH 1,	1923.	
LARD-(Per 100 lbs.)-			
Open.	High	Low.	Close.
			11.50
March 11.62	11.69	11.60	11.62
July 11.75	11.75	11.70	
RIBS-(Boxed 25c more tha	n loose)		22.12
May			10.70
		*****	10.82
July			10.02
FRIDAY, MAR	RCH 2, 1	1923.	
LARD-(Per 100 lbs.)-			
Onon	High.	Low.	Close.
March 11.55 May 11.65	11.5736	11.55	11.571/2
May 11.65	11 6714	11.65	11.65
July 11.75	11 7714	11.75	11.77%
RIBS—(Boxed 25c more the	11.1179	11.10	11.1172
	an mose		10.00
May	10.05	40.071/	10.80
July 10.87½	10.95	$10.87\frac{1}{2}$	10.95

PORK CUTS AT NEW YORK.

(Special Report to The National Provisioner from H. C. Zaun.)

(Special Report to The National Provisioner from H. C. Zaun.)

New York, February 28, 1923.—Wholesale prices on green and sweet pickled
pork cuts: Pork loins, 20@22c; green
hams, 8-10 lbs., 20c; 10-12 lbs., 17½c; 12-14
lbs., 17c; green clear bellies, 6-8 lbs., 18½c;
8-10 lbs., 18c; 10-12 lbs., 17c; 12-14 lbs., 16c; green rib bellies, 10-12 lbs., 16½c;
12-14 lbs., 15c; sweet pickled clear bellies, 6-8 lbs., 14½c; 8-10 lbs., 14c; sweet pickled rib bellies, 10-12 lbs., 17c; dressed
hogs, 14%c; city steam lard, 12c; compound, 13@13¼c.

Western prices: Pork loins, 8-10 lbs.,
16c; 10-12 lbs., 15½c; 12-14 lbs., 14½c;
14-16 lbs., 14c; skinned shoulders, 13c;
boneless butts, 22c; Boston butts, 15@16c;
lean trimmings, 12@13c; regular trimmings, 11c; spareribs, 10c; neck ribs, 5c;
kidneys, 6c; livers, 3c; pig tongues, 14c;
pig tails, 14c.

CANADIAN MUTTON MARKETS.

Sales of sheep and lambs at chief Canadian centers for the week ending February 22, 1923, compared to a week ago and a year ago, are reported by the Markets Intelligence Division of the Dominion Department of Agriculture as follows:

						-	Sal	es	-
						Week ended	Same week, 1922.	Year to date, 1923.	Year
Toronto						Feb. 22. 1.406	1.032	17.079	13,622
Montreal						46	60	4.830	3,195
	(E					33	57	1,256	1,524
							261	3,738	4.838
Calgary .						583	3,426	12,321	12,539
Edmonton		 	٠	۰	۰	32	76	614	1,295
Total .			 	0		2,905	4,912	40,129	37,013

CONTINUOUS DRYERS AND



For Tankage, Blood, Bone Fertilizer, all Animal and Vegetable Matter. Installed in the largest packing-houses, fertilizer and fish reduction plants in the world. Material carried in stock for standard

American Process Co. 68 William St. - - NewYork

CHICAGO HOG PURCHASES.

Purchases of hogs by Chicago packers for the week ending Thursday, March 1, 1923, with comparisons, were reported to The National Provisioner as follows:

	Week		Cor.
	ending	Previous	week.
	Mar. 1.	week.	1922.
Armour & Co	9.400	10.800	12,600
Anglo-Amer. Prov. Co	6,100	6.800	7,600
Swift & Co	11,300	10.400	10.700
G. H. Hammond & Co	6.700	6,300	7.100
Morris & Co	15,100	13,500	9,600
Wilson & Co	11,200	11,800	8,900
Boyd-Lunham & Co	6,000	6,000	8,300
Western Pkg. & Prov. Co.	12,600	12,000	17.500
Roberts & Oake	6,200	5.700	6,000
Miller & Hart	6,100	5,400	6,700
Independent Packing Co	8,100	6,500	7.400
Brennan Packing Co	5,500	5,700	7,200
Wm. Davies Co	2,200	2,700	5,100
Agar Packing Co	1,300	2,600	
Others :	10,700	10,100	12,000
Total	118,500	116,300	126.700

CHICAGO RETAIL FRESH MEATS

(Corrected weekly by C. W. Kaiser, Sec'y United Master Butchers' Ass'n of Chicago.)

	No. 1.	No. 2	No. 3.
Rib roast, heavy end	. 35	32	28
Rib roast, light end	. 40	35	24
Chuck roast		18	14
Steaks, round	. 32	39	25
Steaks, sirloin, first cut	. 50	40	30
Steaks, perterhouse		50	32
Steaks, flank		22	15
Beef stew, chuck	. 18	15	14
Corned briskets, boneless	. 22	20	18
Corned plates		12	10
Corned rumps, boneless		22	18
Lamb.			

Hindq																										
Legs																										
Stews																										
Chops.																										
Chops	,	1	8	h	0	U	1	d	e	r		٠													28	
														,	V	1	u	t	t	0	1	1.				
Legs																									22	
Stew																									15	

	rib and				20 35
Спора,	rib am	ı lom			 00
			Po	rk,	
					18
Loins.	whole.	10@12	avg.		 17
Loins.	whole,	12 to	14		 16
Loins,	whole,	14 and	over		 15
Chops					
Should	ers				
Butts					
Sparer	ibs				

								9	V		1	a	1							
Hindquart																				
Forequarte	819					٠	ø						٠	۰						.15
Legs																				
Breasts .																				 .15
Shoulders		 									e									.19
Cutlets		 											۰						2 4	
Rib and l	loin	ch	0	ni	ĸ.					_										

Suet	 	 	 	@ 4
Shop fat	 	 	 	@ 2
Bones, per				
Calf skins				
Kips	 	 	 	000
Deacons	 	 	 	(T)

CURING MATERIALS.

COMITTO MILITARIA	
Double refined saltpetre, gran6% Crystals	Sacks 65 74
Double refined nitrate of sods, f. o. b. N. Y. & S. F., carloads	42 42 54
Boric acid, in carloads, powdered, in bbls	11
In bbls. in less than 5-ton lots12 Borax, carloads, powdered, in bbls 5½ In ton lots, gran. or powdered, in bbls. 5½	11 % 5 % 5 %
Sugar— Raw sugar, 96 basis, 3c Cuba duty paid Second sugar, 90 basis.	@ 6.50 @ 614

In ton lots, gran. or powdered, in bots. o'A	0 79
Sugar-	
Raw sugar, 96 basis, 3c Cuba duty paid	@ 6.50
Second sugar, 90 basis:	@ 614
Syrup, testing 63 to 65 combined sucrose	
and invert	@24
Standard, granulated, f. o. b. refinery	
(less 2 per cent)	@ 8.00
Plantation, granulated, f. o. b. New Or	
leans (less 2 per cent)	@ 7.75
White clarified, f. o. b. New Orleans	
(net)	@ 7.50
Yellow clarified, f. o. b. New Orleans	
(net)	@ 7%

Salt Granulat	foo:		lote	DOR	ton			h	Oht.	
cago,	hnlk	CHE	IOLS,	per	ton,	1.	υ,	D.,	8	9.80
Medium, bulk	car	lot	s, per	ton.	f.	0,	b.,	Chie	ago,	
bulk										11.30
Rock, ca	ar le	its.	per to	m. f	. 0.	b.,	Ch	icas	0	7.30

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CHICAGO MARKET PRICES

CHICAGO M	ARKET PRICES	Clear bellies, 25@30 lbs
WHOLESALE FRESH MEATS. Carcass Beef.	DOMESTIC SAUSAGE.	Clear bellies, 22@30 lbs. 21112 Fat backs, 10@12 lbs. 29% Fat backs, 12@14 lbs. 29% Fat backs, 14@16 lbs. 20% Fat packs, 14@16 lbs. 20% Regular plates 28%
Week ending Cor. w March 3. 1922	peck, Country style sausage, fresh, in link. 615 Country style sausage, fresh, in bulk. 614 Country style sausage, fresh. 617 Mixed sausage, fresh. 611	WHOLESALE SMOKED MEATS.
Prime native steers 16 @18 15 @ Good native steers 14 @15 14 @ Medium steers 11 @13 10 @ Helfers good 12 @17 10 @	Mixed sausage, fresh	Regular hams, fancy, 14@16 lbs
Cows	Bologna in beef bungs, choice	Picnics, 6@8 lbs
Beef Cuts. Steer Loins, No. 1	Liver sausage in beef rounds	Standard bacon, 8@12 lbs. 20% @214 Standard bacon, 12@14 lbs. 220% Standard bacon strips, 6@7 lbs. 221
Steer Loins, No. 2	Minced luncheon specialty	Standard regular hams, 12@10 108
Steer Loin Ends, No. 2. @24 Cow Loins 15 @20 12 @ Cow Short Loins 20 @24 18 @	Polish sausage	Cooked hams, choice, skinless, surplus fat off, smoked
Green Pilos No. 1	DRY SAUSAGE.	Picnics, skinned, surplus fat off, smoked @20 Loin roll
Steer Ribs, No. 1	Thuringer Cervelat	Ground dried blood\$ 4,90@ 5.00
Steer Rounds, No. 2 @ 14½ Steer Chucks, No. 1 @ 11 Steer Chucks, No. 2 @ 10		Unground and crushed blood. 4.75@ 4.85 Concentrated tankage, ground 4.35@ 4.50 Hoofmeal 3.75@ 3.85 Ground tankage, 10 to 11%. 4.35@ 4.50
	11 i	Concentrated tankage, ground 3.50 2.00 2.00 4.00 2.00 2.00 2.00 2.00 2.0
Briskets, No. 1	Italian style hams	Cuaround bone tunnager
Fore Shanks	41/2 CATICACE IN OIL	HORNS, HOOFS AND BONES. Per ton. No. 1 horns\$250.00@300.00
Strip Loins, No. 1, boneless. Q55 Strip Loins, No. 2	50 Small tins, 2 to crate	No. 2 horns
Strip Loins, No. 3	Small tills, 2 to crate	Hoofs, white \$5.00@ 95.00 Grinding hoofs \$2.50@ 45.00 Round shin bones, heavies \$15.00@140.00 Round shin bones, lights and med \$120.00@140.00 Flet shin bones heavies \$15.00@215.00
Beef Tenderloins, No. 1 @70 @ Beef Tenderloins, No. 2 @60 @ Rump Butts @18 @	Large tins, 1 to crate	Flat shin bones, heavies
Company Comp	9 Large tins, 1 to crate	Shulle terre and knowles 39,000 40,00
Beef Product.	5 (F. O. B. CHICAGO.)	Note-Foregoing horns, hoofs and bones must be assorted, free from grease spots and cracks, hard and clean uniform as to cut and weight, packed in double bags and carload lots, also well and favorably known to foreign and domestic manufacturers.
Brains, per lb. 9 @10 10 @3 Hearts 4 @ 5 4 @ Tongues 28 @30 25 @3 Sweetbreads 40 @41 32 @3		LARD (Unrefined).
	Beef bungs, No. 2, per piece	Prime, steam, cash, tierces @11.50 Prime, steam, loose @10.95 Leaf, raw @10.50 Neutral lard 12% 123% @13
Livers 6½@ 9 8¾@ 8¾@ Veal.	60 Beef bladders, small, per dox. 1.50 8 Beef bladders, medium, per dox. 1.30 Beef bladders, large, per dox. 1.30 Hog casings, medium, f.o.b. 1.00 Hog middles, with cap, per set. 1.6	Neutral lard
Choice Carcass	6 Hog middes, without cap, per set	Pure lard, kettle rendered, per lb., tcs @11% Pure lard tierces @12
Medium Backs		Compound Barrels, 1/4c over tierces; half barrels, 1/4c over tierces; tubs and pails, 10 to 80 lbs., 1/4c to 1c over tierces.
Veal Product. Brains, each 9 @10 11 @ Sweetbreads 54 @65 60 @ Calf Livers 23 @30 36 @	Imp. sheep casings, extra wide, per hank2.30 nom. Imp. sheep casings, med. wide, per hank2.00@2.25	OLEO OIL AND STEARINE.
Calf Livers	VINEGAR PICKLED PRODUCTS.	Oleo stock 10½@10% Prime No. 1 oleo oil. 11½@11½ Prime No. 2 oleo stock 9½@9½ No. 3 oleo oil. 9½@10 Prime oleo stearine, edible. 9½@10 No. 2 oleo stearine, edible. 9½@9½
Medium Lambs @24 @2 Choice Saddles @28 32 @3 Medium Saddles @27 @3	Honeycomb tripe, 200-lb. bbl	
Medium Fores @20 @2	Lamb tongues, long cut, 200-lb. bbl	TALLOWS AND GREASES.
Mutton.	CANNED MEAIS.	Edible tallow 9% 6 9% 6 9% 6 9% 6 9% 6 9% 6 9% 6 9%
Heavy Sheep @ 9 Light Sheep @ 13 Heavy Saddles @ 11 Light Saddles @ 16	No. ¼ No. 1. No. 2. No. 6. Corned beef \$\frac{1}{2}\$ \$2.35 \$4.00 \$13.00 Roast beef \$2.85 \$4.50 \$15.00 Roast mutton \$2.40 \$4.75 \$16.50 Sliced dried beef \$2.50 \$4.50 \$15.00 Ox tongue, whole \$17.50 \$5.00	White, choice grease. 9½@ 9½ White, "A" grease. 9 @ 9½ Yellow grease, 10 to 15 per cent acid. 8½@ 8½
Heavy Fores	Lunch tongue 2.50 4.25 8.75 38.50 Corned beef hash 1.50 2.75 4.25	Yellow grease, 15 to 30 per cent acid 34 37 578 Brown grease 8 6 84 Crackling grease 8 8 8 8 8 9 7 7 8 8 9 8 9 7 7 8 8 9 8 9
Sheep Tongues, each @ 8	6 onlons	House 81% 81% 64% 64% 64% 64% 64% 64% 64% 64% 64% 64
Fresh Pork, Etc. Dressed Pigs, 30-50 lbs16 @17	without, beans 1.25 Potted meats 80	VEGETABLE OILS. Cottonseed oil—white, deodorized, in bbls11%@12 Yellow deodorized in bbls
Lear Lard	BARRELED PORK AND BEEF.	Cottonseed oil—white, deodorized, in bbls114 @12 Yellow, deodorized, in bbls
Spare Ribs @ 9 @1 Butts @13 @1 Hocks @12 @1	1 Family back pork, 35 to 45 pieces	Texas @ 5% Linseed oil, loose, per gal. .93 @96 Corn oil, loose. @104 Soya bean oil, seller tank, f. o. b. coast. .104/@104/2 Cocoanut oil, seller tank, f. o. b. coast. \$ 6 %4
Extra lean trimmings @ 8 @ 212½ @ 1 Tails	9½ Clear plate pork, 20 to 35 pieces. 19.50 6½ Clear plate pork, 35 to 45 pieces. 19.00 8½ Bean pork. 18.50	ANTMAT OTTS
Pigs' Feet	5 Brisket pork .23.00 5 Pinte beef .19.00 7½ Extra plate beef, 200-lb. barrels. .20.00	Prime lard oil
Diagonal Cheek Meat	7½ 1 to 6 natural color, solida f. o. b. Chi-	Prime lard oil. 14 @14½ Extra winter strained lard 13½,@13½, Extra lard oil. 12½,@13½ Extra No. 1 lard oil. 12½,@13 No. 1 lard oil. 12½,@12 No. 2 lard oil. 11½,@12½, Pure nestsfoot oil. 13 @12½, Extra nestsfoot oil. 12½,@13 No. 1 nestsfoot oil. 12½,@13 No. 1 nestsfoot oil. 12½,@13 Acidless tallow oil. 12 @12½,
Powle Little and the control of the	3½ Cartons, rolls or prints, 1 lb	Extra neatsfoot oil 12 4 218 18 No. 1 neatsfoot oil 12 4 218 Acidless tallow oil 12 6 12 12 12 12 12 12 12 12 12 12 12 12 12
Slip Bones	DRY SALT MEATS.	COOPERAGE.
Back fat	1 Extra short ribs	Ash pork barrels, black fron hoops1.85 @1.87% Oak pork barrels, black fron hoops1.95 @1.97% Ash pork barrels, galv. fron hoops1.95 @1.97% Red oak lard tierces2.50 @2.5%
Calas	272 Clear Dellies, 18(220 lbs	Red oak lard tierces 2.50 G2.53 White oak lard tierces 2.80 G2.55 White oak hard tierces 2.80 G2.55 G3.55

Retail Section

Pittsburgh Council Shows Meat Cutting

The Meat Council of Pittsburgh held the first of a series of meat cutting demonstrations recently in the banquet hall of the General Forbes Hotel. It had been planned to hold this meeting in one of the packer's branches, but the favorable responses from invitations sent out to retailers were so numerous that a quick change of meeting place had to be made in order to accommodate the crowd. Accordingly the banquet hall of the General Forbes was engaged and it was none too large. There were about three hundred men present.

The demonstration was on lamb. The actual work of demonstrating the approved, efficient way to cut up a lamb, as well as the lecture explaining the percentage relation of the different market cuts to the whole animal, and some of the best methods of cooking and serving the various cuts, was done by Mr. J. M. Hartzell, an expert in this particular line of work. He is a Pittsburgh representative of a Chicago packer.

Great Interest Aroused.

The demonstration awakened a great deal of interest because it was educational, and many retailers, we are told, have adopted this new system already, feeling that it will produce better results.

An added feature of the meeting was an interesting and instructive talk by R. M. Whitson, who is a representative of one of the companies participating in the council and who is broadly experienced in meat demonstration. He emphasized the opportunity for desirable advertising which these educational meat cutting demonstrations afford to the retail dealer, drew attention to the relatively small consumption of lamb and told of the efforts to increase its use through demonstrations and educational campaigns. Mr. Whitson also told how this educational effort had come to the attention of domestic science teachers, women's clubs, and others and had resulted in requests from these sources for an extension of this work in clubs and schools.

Since the council proposes to carry these demonstrations to the consumers of Pittsburgh through the schools and women's clubs, Mr. Whitson's remarks were of particular value to the committee in charge of this work. His talk appealed to every one, and the proof of the worth of such work was made evident by Mr. Hartzell's demonstration.

At the next meeting it is planned to have a beef cutting demonstration.

A representative of one of the Pittsburgh packers has conducted a number of educational demonstrations of this sort before domestic science classes and women's clubs in a limited way, with such success that it appealed to the council as a decidedly valuable feature by which correct information about meat could be told the consumer on a large scale.

The meeting was the largest in point of attendance as well as the most enthusiastic that the council has ever enjoyed.

RETAILERS' ACCOUNTING FORMS.

(Continued from page 23.)

operations divide themselves along weekly lines and it is therefore suggested that periods of four weeks each be adopted as a basis for summarizing and reviewing the results of operation.

In the following paragraphs the calendar on the following paragraphs the calendar year for 1923 has been divided into 13 four-week periods; each period containing the same number of days. Any one of these periods may then be compared with any other period.

Closing Periods for 1923.

First period—Four weeks ending Saturday, January 27, 1923.
Second period—Four weeks ending Sat-

urday, February 24, 1923.
Third period—Four weeks ending Saturday, March 24, 1923.
Fourth period—Four weeks ending Sat-

urday, April 21, 1923.
Fifth period—Four weeks ending Saturday, May 19, 1923.
Sixth period—Four weeks ending Satur-

Sixth period—323.
Seventh period—Four weeks ending Sat-

urday, July 14, 1923. Eighth period—Four weeks ending Sat-

Eighth period—Four weeks ending Saturday, August 11, 1923.

Ninth period—Four weeks ending Saturday, September 8, 1923.

Tenth period—Four weeks ending Saturday, October 6, 1923.

Eleventh period—Four weeks ending Saturday, November 3, 1923.

Twelfth period—Four weeks ending Saturday, December 1, 1923.

Thirteenth period—Four weeks ending

Thirteenth period—Four weeks ending Saturday, December 29, 1923.

Meat Trade Movies-No. 28.



TEACHING THE RETAIL SALESMAN.

The Milwaukee Meat Council set an example to the country in securing a practical packinghouse man like Emil Hirsh, manager of the Plankinton Packing Co., to Instruct the students of its retail school in the details of the meat business from the live animal clear through to the retail block. Mr. Hirsh's lectures have appeared in THE NATIONAL PROVISIONER and have been read with much interest.

TOLEDO RETAIL VEAL CUT TESTS.

On February 28, 1923, the Toledo Master Butchers Association held a very interesting demonstration which was well attended and is most profitable to all retailers.

The blackboard demonstration of a side of veal by Manthey & Poggemeyer, at the regular meeting of the Toledo Master Butchers Association, resulted in the following test: Side of veal, 52 lbs. at 21c

21/4 lbs. front veal shank\$.20
41/4 lbs. veal breast at 20c	.85
½ lb. veal kidney at 20c	.10
3½ lbs. rib veal chops at 30c	1.05
121/4 lbs. veal shoulder at 25c	3.07
1 lb. flank	.30
8 lbs. veal loin at 40c	3.20
3% lbs. veal rump roast at 35c	1.30
5 lbs. veal steak at 50c	2.50
2 lbs. veal steak at 40c	.80
2 lbs. veal loaf at 40c	.80
2½ lbs. veal shank from hind	.20
5 lbs. waste	-
81	4.32
Cost, 52 lbs. at 21c 1	0.92
Gross profit\$ 31.1% on cost.	3.40

LOCAL AND PERSONAL.

The Banner Meat Co., Davenport, Ia., was recently opened.

Arthur Dore, Blackfoot, Ida., has pur-

Artnur Dore, Blackfoot, Ida., has purchased the Pacific meat market.
C. H. Derry of Alliance, Ohio, has sold his meat market to M. H. Steele.
C. E. Blessing has opened a large meat market at Point Pleasant, W. Va.
Tom Agnes will conduct a meat market on West street, Beach City, Ohio.
Chas. L. Barth of San Fernando, Calif., will open a market at Chatsworth

will open a market at Chatsworth C. J. Johnson, Ferdinand, Ida., has pur-chased the Ferdinand meat market.

A. Wheeler has purchased the Paul

Miller meat market at Ainsworth, Ia.
E. E. Hart, Darby, Mont., has disposed of his meat business to W. T. Harris.
R. P. Smith, Indianapolis, Ind., opened a meat market at 1531 East 17th street.

Patterson opened a meat market at

1327 Silver avenue, Indianapolis, Ind.
Jake Bowman will open a meat a
grocery business at Clearwater, Kans.

It is reported that Ricker & Seybold will open a meat market at Lock Haven, Pa. Christ Miller, Colby, Kans., has puchased the butcher shop of G. A. Steinle.

Paul E. and Reuben E. Anderson bought the Peoples meat market at Willmar, Minn. Barney Beard has purchased the business of the Twin City Meat Co., Freewater,

Frank Farley has opened a meat marin the Stilwell block, Ogdensburg,

John P. Ford and John P. O'Brien will open a new meat market at Hancock, N. Y.

Pink Booth has purchased a half interest in the Blaylock meat market, Red Oak,

Charles Zender and Walter Martin have purchased the Capper market at Chester, Idaho.

Roos has opened a new market in the Dale building, Humboldt, Kans.

A. N. Grady, Kalona, Ia., sold his meat market to the firm of Kauffman & Kin-

singer.

A. F. Arnold, Burns, Kans., has purchased the butcher shop of J. W. Mc-

Gale & Rhoades, Stanton, Mich., have purchased the meat business of Peakes & Bennett.

1923.

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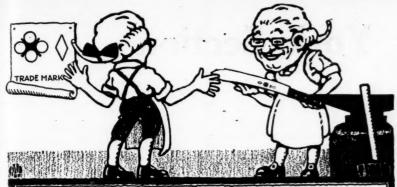
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HAND FORGED ON THE ANVIL FROM DOUBLE SHEAR STEEL John Wilson's Butcher Knives and Steels

1750 THE REST THEN Standard of the World

1923 THE BEST TODAY

I. WILSON, SYCAMORE STREET, SHEFFIELD, ENG.

Sole American Ag

H. BOKER & CO., Inc., NEW YORK, N. Y.

W. C. Schurke of Ankeny, Ia., has purnased the Economy market at Des chased Moines, Ia.

Joe Holmes, Garden City, Kans., has purchased the butcher shop fixtures of L. D. DeBelle.

The Canoose meat market is soon to be moved into the former pool hall at Stevenson, Wis.

Anderson & Nelson, Fourteenth street grocers at Rockford, Ill., have added a meat department.

Fred G. Gumprecht, Central City, Nebr., has purchased the Central meat market from M. P. Slegal.

Dave Moore and Lawrence Hoskins have

opened a meat market in the Curt Nobis building, Barry, Ill.

Cowan & Greisbach have opened a meat and grocery store at 108 Howard street, Hibbing, Minn.

The Nebergal Meat Co., Albany, Ore., has let the contract for a four-story brick addition to its plant.

addition to its plant.

Lynch & Murphy, St. Peter, Minn.,
have discontinued groceries and will deal

exclusively in meats.

exclusively in meats.
J. A. Timmer of 135 Washington street opened a branch meat market at 331 River street, Manistee, Mich.
Ed. Johnson has purchased the interests of his partner, John Cocking, in the meat market at Morrison, Ill.
J. B. Horn of Windsor, Ill., has taken possession of the East End grocery and meat market at Pana. Ill.

meat market at Pana, Ill.

John Kertis of Windber, Pa., has sold his interest in the firm of Sabo & Kertis to his partner, Paul Sabo.

Mark Sims has decided to engage in the meat and grocery business in the Ridge-

way building, Edna, Kans.

L. E. Harron, Fredonia, Kans., has purchased the interest of A. W. Carlson in the West Side meat market.

W. C. Henning has purchased the Enterprise office at Cotesburg, Ill., which he will send the content of the conte

will remodel into a meat market.

E. G. Harvey, Bloomington, Ill., who has been connected with the Utesch market, has purchased the B. & N. market.

C. Van Sickler of Whitehall, Wis., has purchased the meat business and building of Whitehall, which was the meat business and building of Whitehall was the meat business.

of Wyman Hewitt at Merrillan, Wis. R. H. Hingley and Thomas Cutting have

R. H. Hingley and Thomas Cutting have opened a meat market and grocery at 314 Gabriel boulevard, San Gabriel, Cal.
Anderson Bros. have purchased the Walter Hansen meat market at Dillon, Mont. A. L. Anderson is the manager.
Louis Strasses of Peotone and Paul Meier of Matteson have opened a meat market in the Stassen building, Joliet, Ill.

For Sausage Makers

BELL'S

Patent Parchment Lined

SAUSAGE BAGS

SAUSAGE SEASONINGS

For Samples and Prices, write

THE WM. G. BELL CO. **BOSTON**

The Iron River-Manistique Meat Prod-

ucts Co., Iron River, Mich., has been in-corporated with a capital stock of \$25,000. The Producers Public Market will be formed at Walla Walla, Wash. It is planned to build a market on Second street.

F. L. Davis and A. Moll have taken over the Palace meat market at Holton's Pro-ducers' and Consumers' Market, Vancouver, Wash.

J. W. Patterson, proprietor of the grocery and meat marekt at 1042 Griswold street, Port Huron, Mich., sold out to O. R. Mathewson.

South & Son, who have been conducting a meat market on North Sixth Street, Carmi, III., have opened a market on Fourth street.

John Brady has opened a meat market and grocery store in a new \$20,000 building at Burlington and Madison streets, Davenport, Ia.

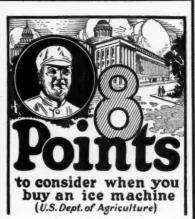
F. Kline, Lansing, Mich., who has a market at 435 North Magnolia street, has opened a branch on the corner of Homer

and Prospect streets.

The quarters known as the "Old Wilson Bar," Bakersfield, Cal., have been remodeled and the Hunter meat market has

been opened therein.

John A. Mercer, who has been conducting a grocery store and meat market at Litchfield, Ill., with his brother, has sold his interest to his brother, C. H. Mercer. The Cold Storage Market, Endicott,



In a series of advertisements which will follow I will give you eight points which should be considered before buying an ice machine, regardless of make.

These points have been determined by the United States Department of Agriculture, after long study and observation, and form a standard which should be adopted by every grocer and butcher in selecting an ice machine.

Watch these points-one in each ad I write.

Yours truly.

market Joe

Baker Ice Machine Co.,

Gentlemen:		
		on in any way, send We may install an ic
machine a	bout	
Name		
Street		
City		State
_		-

NATE OF STATE REFRIGERATION

Wash., was sold to the L. & W. Meat Co. of La Crosse. The latter company now operates markets in La Crosse and Washtucna.

Harry Sterns of Chicago, who purchased the Diamond meat market of M. R. Cast-ner at Berrien Springs, Mich., recently sold the market to L. H. Diamond who has taken charge of it.

The Carsten meat market, Burlington, The Carsten meat market, Burlington, Wis., has been undergoing changes. Additional floor space and new equipment have been added, improving cold storage and meat packing facilities.

John Kratt of Greenwich, Conn., has purchased the store formerly owned by the American Provision Co. and will continue to conduct a meat market under the name of Kratt & Co. at Newburg. N. Y.

name of Kratt & Co., at Newburg, N. Y.

Burns & Co., at Newburg, N. Y.
Burns & Co., Lethridge, Mont., have
planned to rebuild the wholesale and retail plant. It is estimated that the cost
will be between \$30,000 and \$40,000.
Among other changes made will be the
installation of a new refrigeration plant.

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of fo ba W fill

New York Section

F. L. Brown, plant accounting department, Swift & Company, Chicago, spent a few days in New York this week.

George J. Edwards, manager of the New York district of Swift & Company, left on a trip to Chicago and other western cities on Friday.

A. W. McLaren, manager, traffic department; O. W. Menge, smoked meat department, and W. T. S. White, produce department, Morris & Company, Chicago, were visitors in the city this week.

Prices realized on Swift & Company's sales of carcass beef in New York City for week ending February 24, 1923, on shipments sold out, ranged from 11.00 cents to 16.00 cents per pound, and averaged 13.95 cents per pound.

Dr. Arthur Lowenstein, vice-president, Wilson & Company, Chicago, arrived in New York last Sunday on the President Harding after a tour of the larger cities of Europe. Dr. Lowenstein spent a few days in New York before returning to Chicago.

Following is a report of the New York City Health Department of the number of pounds of meat, fish, poultry and game seized and destroyed in the city of New York during the week ending February 24, 1923: Meat—Manhattan, 1,040 lbs.; Queens, 14 lbs.; Richmond, 205 lbs.; total, 1,359 lbs.

A. C. Sinclair, vice-president, and R. E. Buchanan, sales manager, T. M. Sinclair & Co., Cedar Rapids, Iowa, were in New York during the week. On Friday evening of last week they attended a dinner given by the New York salesmen at Keen's on West 44th street. Mr. Sinclair

expects to visit the company's branches throughout the country on this trip.

BOOKKEEPING FOR RETAILERS.

The main event at the last meeting of Ye Olde New York Branch, United Master Butchers, was the talk given by Messrs. R. M. Roudabush and H. F. Buchanan, representatives of the U. S. Department of Agriculture, at the request of President Kramer, who spoke on the new simplified bookkeeping system prepared for retail meat dealers by the Northwestern University and the U. S. Department of Agriculture in co-operation with the Master Butchers' Association, Institute of American Meat Packers and the National Association of Meat Councils.

Mr. Buchanan emphasized the fact that the system was a very simple one, devised particularly to meet the accounting needs of both the large and small meat dealers, and that any dealer who could keep a record of his cash transactions should be able to operate this system by merely taking a few minutes of his time each day, thereby being in a position to ascertain at a glance a true condition of his business from time to time. He stated that this system is a result of numerous conferences between the various organizations or the industry, officials of the Northwestern University, and the Department of Agriculture.

He emphasized the point that the system was devised for the purpose of establishing uniform records by which various cost averages can be ascertained which will enable each dealer to compare his costs with the average costs of the industry as a whole.

The supply of these bookkeeping records is very limited. However, to the first 250 retailers who will enroll for the installa-

tion of this system, and who are willing to co-operate in this work, a year's supply of the necessary forms, including assistance in installing the work, will be given free of charge.

free of charge.

It was pointed out very forcibly that the agencies conducting this study are in no way interested in the profits of the retailers, and that the records would be held strictly confidential and the identity of the individual declaration.

individual dealers would not be disclosed.

The office and meeting room of the Ye Olde N. Y. Branch is to be the headquarters for the representatives during their stay in New York, where any information can be obtained in regard to the installation. Personal visits by the Department representatives will be made to any one desiring the installation of the system, and further assistance rendered from time to time if so desired.

This service is to be offered in a number of cities throughout the country where there are a sufficient number of dealers interested.

Mr. Buchanan stated that at a similar meeting of the Master Butchers' Association in Chicago, nearly 50 per cent of the retailers present signified their willingness to co-operate in this work. Over 25 per cent of the retailers present at the meeting of the Ye Olde N. Y. Branch signified their willingness to co-operate also.

A special meeting at the Ye Olde New

A special meeting at the Ye Olde New York Branch meeting rooms has been called for Thursday, March 1st, 8:15 p. m., at which time this work will be explained in a general way, and the results to be obtained fully explained. The Association has heartily endorsed

The Association has heartily endorsed the adoption of this system and urges all members to take advantage of this opportunity and get their names in among the first to apply for this service. The service is not to be limited to the members of the Master Butchers' Association, but is open to all retail dealers.

WHOLESALE DRESSED MEAT PRICES.

Wholesale prices of Western dressed fresh meats were quoted by the U. S. Bureau of Agricultural Economics at Chicago and three Eastern markets on Thursday, March 1, 1923, as follows:

1, 1920, as follows.				
Fresh Beef-				
STEERS:	CHICAGO.	BOSTON.	NEW YORK.	PHILA.
Choice	\$16.50@17.00	\$@	\$15.00@16.00	\$@
Good	15.00@16.00	13.50@14.00	13.00@14.50	13.00 @ 14.00
Medium	13.00@14.00	12.00@13.00	12.00@13.00	12.00@13.00
Common	10.00@12.00	11.00@12.00	10.00@12.00	10.00@12.00
COWS:	10.00 (4 12.00	22100 00 22100	20100 @ 22100	
Good	10.50@11.00	10.00@11.00	11.00@11.50	11.00@12.00
Medium	9.00@10.00	8.50@ 9.50	10.00@10.50	10.00@11.00
Common	8.00@ 9.00	@	9.00@10.00	9.00@10.00
BULLS:				
Good			9.00@10.00	
Medium	@	@	8.50@ 9.00	9.00@10.00
Common	7.75@ 8.00	@	7.50@ 8.00	@
Fresh Veal*-				
Choice	18.00@20.00		24.00@25.00	@
Good	17.00@18.00	17.00@19.00	22.00@23.00	20.00@22.00
Medium	14.00@16.00	14.00@16.00	18.00@21.00	17.00@18.00
Common	12.00@14.00	11.00@13.00	14.00@18.00	11.00@15.00
	12.00 @ 11.00	11.00@ 10.00	11.00@10.00	11.00 @ 10.00
Fresh Lamb and Mutton-				
LAMB:				00.000000000
Choice	23.00@24.00	26.00@27.00	24.00@25.00	26.00@27.00
Good	20.00@22.00	23.00@25.00	23.00@24.00	24.00@26.00 22.00@23.00
Medium	18.00@20.00	21.00@23.00 18.00@20.00	22.00@23.00 20.00@21.00	20.00@23.00
Common	16.00@18.00	18.00@20.00	20.00@21.00	20.00@21.00
YEARLINGS:	6	@	17.00@19.00	20.00@22.00
Good	@	@	15.00@17.00	20.00@ 22.00
	@	@	13.00@17.00	@
Common				
Good	12.00@13.00	13.00@15.00	13.00@14.00	@
Medium	10.00@12.00	12.00@13.00	12.00@12.50	13.00@15.00
Common	8.00@ 9.00	@	10.00@11.50	10.00@12.00
Fresh Pork Cuts-	0.000 0.00		10:00@11:00	10100 @ 12100
LOINS:	11.00017.00	10.000 10.50	15 50 615 00	16.00@17.00
8-10 lb. average	14.00@15.00	16.00@16.50	15.50@17.00	15.00@14.00
10-12 lb. average	13.00@14.00	15.50@16.00 14.00@15.00	14.00@15.50 13.00@14.50	14.00@15.00
12-14 lb. average	12.50@13.00 12.00@12.50	13.50@14.00	13.00@14.00	13.00@14.00
14-16 lb. average	11.00@12.00	12.50@13.00	12.50@13.00	13.00@14.00
16 lb. over	11.00@12.00	12.50@15.00	12.50@15.00	
Skinned	11.00@12.00		12.00@14.00	12.00@13.00
PICNICS:	11.00@12.00		12.00@14.00	12.00@13.00
4-6 lb, average	10.50@11.00	11.50@12.00	11.00@12.00	12.00@12.50
6-8 lb. average		11.00@11.50	@	11.00@12.00
BUTTS:	10.000010.00	11.00011.00		*****************************
Boston style	12.00@13.50	@	15.00@16.00	14.00@15.00
Dopton print	12.00@ 10.00		201.10	20.00

^{*}Veal prices include "hide on" at Chicago and New York.

WASHINGTON HEIGHTS BALL.

The fifth annual ball of the Washington Heights Branch, United Master Butchers of America, held on Wednesday of last week at Floral Gardens, 146th Street and Broadway, was a wonderful success both socially and financially. The artistic ballroom of Floral Gardens was tastefully decorated, and happy family groups were clustered around the little tables placed at intervals outside the dancing pavilion. The floor was good and the music was better. The members of this branch, as in fact every branch of the United Master Butchers, look forward with keen anticipation to their annual affair, and when the night arrives the fun starts early and lasts until early morning.

until early morning.

E. Schmelzer made an ideal chairman, looking out for the comfort of everybody, and seeing that everyone had a good time. To him as well as to all the members of the various committees great credit is due.

Among the visitors from other branches were the president of Ye Olde New York Branch, George Kramer, with Mrs. Kramer, Charles Kramer and Mr. and Mrs. Louis Goldstein; from Bronx Branch, First Vice-President Philip Gerard with Mrs. Gerard, Mr. and Mrs. Vogelsang, and Mr.

and Mrs. Frank Greas.

The officers of Washington Heights Branch are: Chas. Hembdt, president; L. Colette, first vice-president; Gus. W. Beck, second vice-president; A. Muller, treasurer; J. Schoenbach, corresponding secretary; R. Utenwold, financial secretary; M. Gus. Lowenthal, warden. Trustees: Joseph Eschelbacher, F. Perpignan and E. Schmelzer.

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NEWS OF THE MASTER BUTCHERS.

At the meeting of the Washington Heights branch, United Master Butchers of America, held last Tuesday evening, four new members were initiated. The ball committee reported that the affair on Washington's birthday eve was a success financially and socially. Adolph Muller, treesurer, resigned and Gus Beck, an active member of the branch, was elected to fill this office.

Adolph Muller, treasurer of the Washington Heights branch, United Master Butchers of America, who has retired from business in the East, will visit Los Angeles and other cities of interest before starting in business in the West.

A preliminary meeting for the formation of the ladies' auxiliary of the United Master Butchers of America was held on Tuesday afternoon in the meeting rooms of Ye Olde New York branch, United Master Butchers of America. The auxiliary will have for its chief object the interest of the master butchers, i. e., to be of assistance to any master butcher or to the organization as a whole; and, secondly, sociability among the wives, daughters, sisters, etc., of the master butchers.

Mrs. George Kramer, who fostered the idea of the auxiliary, was made temporary chairman. Ye Olde New York branch has volunteered the use of its meeting rooms, free of charge, for meetings and such other activities which the auxiliary may contemplate. Among some of the sponsors at Tuesday's meeting were Mrs. Gerard, Mrs. Schmelzer, Mrs. Goldstein and Mrs. William Kramer.

William Kramer.

The meeting of the Bronx Branch, United Master Butchers of America, held last Monday evening, was well attended. Six new members were initiated; eleven new fire policies and seven on plate glass were received. Fred Wehnes is treasurer of the plate glass fund and Peter Doersam of the fire fund, while Fred Hirsch is secretary for both. The members were very enthusiastic about the ladies' night, which is to be held on the evening of Wednesday, March 21, and which will take the form of an apron and necktie party. Mr. Hirsch, in commenting upon the appeal to have banks open on Saturday evenings that butchers might make late deposits, stated that the banks in the Bronx opened from 9 to 11 o'clock on Saturdays for the convenience of the butchers in that section.

It is planned to hold a social on Wedness-

It is planned to hold a social on Wednesday afternoon, March 21, in room 818, No. 250 West 57th street, when the wives, daughters, sisters, etc., of the master butchers, irrespective of what branch they may be members of, are cordially invited to attend. The ladies are very enthusiastic and expect to have a wonderful organization, where the wives of butchers, many of whom assist their husbands in the conduct of business, can get together and in an afternoon of sociability forget the cares of everyday life.

Perhaps Your Losses Equal YORK Costs



Possibly you are thinking of the installation of Mechanical Refrigeration as an expense. Please consider it an investment—not an expense.

An investment that will pay you better and more certain dividends than any other business equipment you could buy. The first cost of a York Refrigerating Plant is soon returned to you through the manifold savings which it effects.

The money that is probably slipping away from you by the use of ice would soon pay for a fine York installation—then your losses would be turned into profits.

YORK MANUFACTURING COMPANY, YORK, PENNA.
(Ico Making and Refrigerating Machinery Exclusively)



The Stockinet Smoking Process

The Twentieth Century Way

Smoke your hams, picnics, shoulders and beef hams in stockinets and market them that way

Get away from your wrapping material and labor cost

The Stockinet will keep your meats moistened by their own juices up to time of consumption

Saves Labor—Trimming—Shrinkage Sanitary

For Further Information, Write

Thomas F. Keeley, Licensor
516 East 28th Street Chicago, Ill.

SEE PAGE 69 FOR CLASSIFIED FOR SALE AND WANTED ADS



No. 10 REGULAR Capacity—24 lbs. Gold, Gray or White

THE BARNES SCALE

"THE SCALE OF QUALITY"

Accurate Attractive Small Base Large Platform

Durable Sanitary

Sold only by

RELIABLE DEALERS

Manufactured by

BARNES SCALE CO.

DETROIT, MICH.

58		THE NATIONAL PROVISIONER	March 3, 1923.
NEW YORK	M	ARKET PRICES	Western, dry packed, 5 lbs. and over, lb.27 @29 Western, dry packed, 4½ lbs. each, lb27 @29
TIETT TOTAL			Western, dry packed, 3½ lbs. each, lb25 @26
LIVE CATTLE.		FRESH PORK CUTS.	Western, dry packed, 3 lbs. and under, lb.21 @24
Steers, ordinary to prime	10.30	Fresh pork loins, Western, 10@12 lbs. avg.17 @18	Old Cocks—Fresh—dry packed—boxes or bbls. Western, dry picked, small, boxes17 @19
Cows, common to choice1.75@		Fresh pork tenderloins	Western, scalded, bbls
Bulls, common to choice4.00@	6.40	Frozen pork tenderloins	Ducks, Western, per lb
LIVE CALVES.		Shoulders, city, 10@12 lbs. avg16 @17	Squabs-
Calves, veal, prime, per 100 lbs16.75@	17.00	Shoulders, Western. 10@12 lbs. avg14 @15 Butts, boneless, Western18 @19	White, 11 to 12 lbs. to doz., per doz11 @12
Calves, veals, common to medium11.00@	15.25	Butts, regular, Western	White, 10 lbs. to doz., per doz 9.50@10.00
Calves, veals, culls, per 100 lbs 7.00@	10.00	Fresh hams, city, 8@10 lbs. avg	Culls, per doz
LIVE SHEEP AND LAMBS.		Fresh hams, Western, 10@12 lbs. avg20 @21 Fresh picnic hams, Western, 6@8 lbs. avg.12 @13	LIVE POULTRY.
Lambs, prime, 100 lbs	16.00	Extra lean pork trimmings16 @17	BIVE TOOLIKI.
Sheep, ewes, prime, 100 lbs 7.25@		Regular pork trimmings, 50% lean 9 @10 Fresh spare ribs	Chickens, via express
Sheep, ewes, common to good, per 100 lbs. 4.50@	7.00	Raw leaf lard	Ducks, via express
LIVE HOGS.		BONES, HOOFS AND HORNS.	Turkeys, via express
Hogs, heavy 81/2@	834		Geese, via express
Hogs, medium 914 @	9.35	Round shin bones, avg. 48 to 50 lbs., per 100 pcs	Guineas, per pair@55
Hogs, 140 lbs		Flat shin bones, avg. 40 to 45 lbs., per	
Roughs 6% @		100 pcs	BUTTER.
		Striped hoofs, per ton	591/ @5914
DRESSED BEEF.		White hoofs, per ton	Creamery (92 score) .52¼ @52½ Creamery, seconds .48½ @49½
CITY DRESSED.		Thigh bones, avg. 85 to 90 lbs., per 100 pcs	Creamery, firsts
Choice, native, heavy		Horns, avg. 7½ oz. and over, No. 1s300.00@325.00	Creamery, lower grades @
Choice, native, light		Horns, avg. 71/2 oz. and over, No. 2s250.00@275.00	ECCO
	20/9	Horns, avg. 71/2 oz. and over, No. 3s., 200.00@225.00	EGGS.
WESTERN DRESSED BEEF.		FANCY MEATS.	Fresh gathered, extras, per doz
Native steers, 600@800 lbs		Fresh steer tongues, untrimmed @32c a pound	Fresh gathered, extra firsts
Western steers, 600@800 lbs12 @		Fresh steer tongues, L. C. trim'd @38c a pound	Fresh gathered checks, fair to choice, dry .29 @31
Texas steers, 400@600 lbs10 @	11	Calves, beads, scalded	Fresh gathered dirties, No. 1
Good to choice heifers	15	Sweetbreads, beef @50c a pound	The second secon
	10	Beef kidneys	FERTILIZER MARKETS.
Fresh bologna bulls 7 @	8	Mutton kidneys 6 6c each Livers, beef	BASIS NEW YORK DELIVERY.
BEEF CUTS.		Oxtails @15c each	Ammoniates.
		Hearts, beef	Ammonium sulphate, bulk, f. o. b.
	ity. 26	Beef hanging tenders @17c a pound Lamb fries 210c a pair	works, per 100 lbs
	22	· · ·	100 lbs., f. o. b. New York 3.43 493.30
	19	BUTCHER'S FAT.	Blood, dried, 15-16% bulk, per unit 424.80
	29	Shopfat @ 3	Fish scrap, dried, 11% ammonia, 15% B. P. L., delivered Baltimore Nominal
No. 3 loins @14 24 @	26	Breastfat	Fish guane, foreign, 18@14% ammonia, 10% B. P. L. 5.10 and 10c
	24	Inedible suet @ 5	Fish scrap, acidulated, 6% ammonia, 3% A. P. A., f. o. b. fish factory 3.85 and 50c
	161/4	Bones @25	8% A. P. A., f. o. b. han factory S.55 and occ Soda nitrate, in bags, 100 lbs., spot @2.60
	13	SPICES.	Sode nitrate, in bags, futures @2.621/2
	112		Tankage, ground, 10% ammonia, 15% B. P. L., bulk. 4.40 and 10c
	13	Pepper, Sing., white 15 Ground.	Tankage, unground, 9-10% ammonia 4.30 and 10c
	12	Pepper, Sing., black	Phosphates.
No. 3 chucks		Pepper, red	Bone meal, steamed, 3 and 50 bags per ton
Rolls, reg., 6@8 lbs. avg		Cinnamon	Bone meal, raw, 41/2 and 50 bags per
Rolls, reg., 4@6 lbs. avg		Corlander 13 16	Aeld phosphate, bulk, f. o. b. Balt.,
Tenderloins, 4@5 lbs. avg		Cloves 29 34 Ginger 16 19	per ton, 16%
Shoulder clods10 @		Mace 47 52	Potash. Kalnit, 12.4% bulk, per ton
DRESSED CALVES.		CURING MATERIALS.	Manure salt, 20% bulk, per ton @10.00
			Muriate, in bags, basis 80%, per ton @33.50 Sulphate, basis 90%, bags, ton @45.00
	(30 (23	In lots of less than 25 bbls.: Bbls. bags.	Sulphate, basis 90%, bags, ton @45.00
Western calves, choice	26	Double refined saltpetre, gran 6% 6%	
Western calves, fair to good		Double refined saltpetre, small crystal 7% 7% Double refined nitrate sods, gran 4% 4%	BUTTER AT FOUR MARKETS.
		Double refined nitrate sods, crystals 5% 5%	Wholesale prices of 92 score butter at
DRESSED HOGS.		In 25-bbl, lots:	Chicago, New York, Boston and Philadel-
Hogs, heavy 64	131/2	Double refined saltpetre, gran 6% 6% Double refined saltpetre, small crystals 7% 7%	phia, for the week of February 17 to Feb-
	13%	Double refined nitrate soda, gran 4% 4%	ruary 23, 1923:
	14%	Double refined nitrate soda, crystals 5% 5% In carloads:	17. 19. 20. 21. *22. 23. Chicago
	14%	Double refined nitrate of soda, gran 4% 4%	New York51 51 51 51 51
DRESSED SHEEP AND LAMBS.		Double refined nitrate of sods, crystals 51/4 51/4	Boston
		GREEN CALFSKINS.	Wholesale prices of carlots, fresh cen-
Lambs, choice, spring		5-9 914-1214 1214-14 14-18 18 lbs.	tralized butter, 90 score at Chicago:
Sheep, choice14 @	16	ibs. ibs. ibs. ibs. up.	17. 19. 20. 21. *22. 23.
Sheep, medium to good		Prime No. 1 venis.21 2.40 2.50 2.75 3.50	Receipts of butter by cities, tubs:
		Prime No. 2 veals.19 2.20 2.25 2.50 3.25 Buttermilk No. 118 2.10 2.15 2.40	This Last Last Stice Jan. 1,
SMOKED MEATS.		Buttermilk No. 216 1.90 1.90 2.15	Chicago 40,658 21,642 28,298 369,739 319,944
Hams, 8@10 lbs. avg		Branded grubby13 1.40 1.50 1.65 2.10	New York 36,747 46,728 43,699 438,261 407,721 Boston 15,224 7,173 12,204 114,661 114,473
	021 021	No. 3At value	Phila
	15	DRESSED POULTRY.	Total102,826 84,628 98,388 1,037,018,969,414
	15	FRESH KILLED.	Cold storage movement, lbs.: Into Out of On hand Cor. day of
	18	Fowls—Fresh—dry packed, milk fed—12 to box. Western, 66 lbs. and over to dozen, lb30 @31	storage, storage, Feb. 23, week, 1922.
Boof tengue, heavy	45	Western, 48 to 54 lbs. to dozen, lb30 @31	Chlengo 9,211 70,111 2,401,675 8,629,935 New York 154,700 117,959 2,364,071 5,087,054
	222	Western, 43 to 47 lbs. to dozen, lb28 @30	Boston 23,455 61,371 1.232,615 3,412,919 Phila 46,500 20,110 470,426 934,790
Bacon, boneless, city	22 118	Western, 36 to 42 lbs. to dozen, lb26 @28 Western, 31 to 35 lbs. to dozen, lb23 @25	Total243,866 269,551 6,468,987 19,064,698

923.

a 29 @26 @24 @19 @18 @24

10.00 3.00

17

45

521/ 49 1/2 52

42 40

31

10c

21/2

10e

There is only one way that smoke can get into meat, that is by diffusion. You put smoke on the outside of your meat, and by diffusion a little of it only ever gets into

You must necessarily dry out your meats before they will take smoke. This puts more or less of an impervious crust on the outside of the meat, through which it is difficult for the smoke to penetrate. Consequently, you have very little, if any, smoked flavor in your smoked

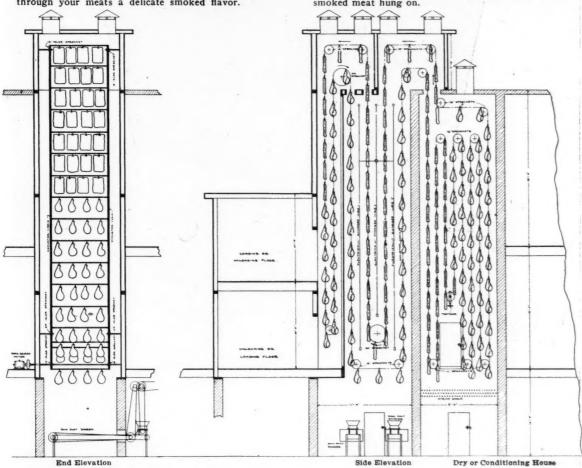
Smoke your sweet pickled meats as well as all other kinds, while they are wet and warm—just out of the soaking vats—and you will neutralize a considerable portion of the salt flavor, and at the same time get into and all through your meats a delicate smoked flavor.

There is only one way by which you can smoke your meats wet, and that is by the Alsop Electrical Meat meats wet, and t Smoking Process.

Here is the way it is done:

Here is the way it is done:

The meat is hung on rods suspended between chains that are moving over sprockets through the electric smoke house, and then continuing into the conditioning or drying house adjacent. The wet meat smoked is dried to the consistency or firmness you wish, then the chain is started again and the meat commences to come back through the electric smoke house over other sprockets. It is then smoked again for the brilliant varnished appearance, and continues on until it reaches the unloading floors, where it is taken off, and more wet unsmoked meat hung on.



End Elevation

The Alsop Electrical Meat Smoking Process will do this for you:

- 1. Any permanent color, from the palest lemon to the darkest cherry. The color of every piece of your meat is always the same—just that particular shade you may
- A delicacy in your sweet pickled meats that brings their flavor up very near to your box cure. A sweet smoked flavor, even in the coarsest dry salt.
- Unusual keeping qualities, due to the preservative ac-tion of the smoke, which you get all through your meat, and the further fact you do not get your meat hot.

4. Shrinkage saving from 2% to 5%.

This process is the greatest invention ever offered the packing industry. Sooner or later you will put this process into your plant. Why not do it now, and get the big profits that the "first users" are getting over those who come in later.

J. N. Alsop, the inventor of this process, also revolutionized the flour milling industry with his electric flour bleacher, and that is much larger than the packing industry. Ask any miller about the money those millers made who first adopted his process.

Delighted to show you the process, or smoke some meat for you, cured or fresh—this without any obligation.

Write for our booklet, "The Electrical Meat Smoking Process"

Packers Meat Smoking Corporation OWENSBORO, KY. Central Trust Bldg. INCORPORATED



SELECTED for plump excellence of texture, evenness of fat and lean, smoothness of skin, these choicest pork sides are specially trimmed, and given our patient, exact curing and smoking.

The quality of the bacon is enhanced by the appetizing, mildly-sweet flavor which is thus imparted to it. Tell your dealer you want Wilson's Certified Bacon; if he hasn't it ask him to get it for you, we can stock him promptly.

LIKE all Wilson products, Wilson's Certified Bacon is selected, handled and prepared with the same *respect* your own mother shows toward anything she prepares especially for you.

"Wilson's Meat Cookery"—Our authoritative book on the economical buying and cooking of meats mailed free on request. Write us a postal for it. Address Wilson & Co., Dept. 346, 41st Street and Ashland Avenue, Chicago.

This mark

WILSON & CO Month guarantee

The Wilson label protects your table